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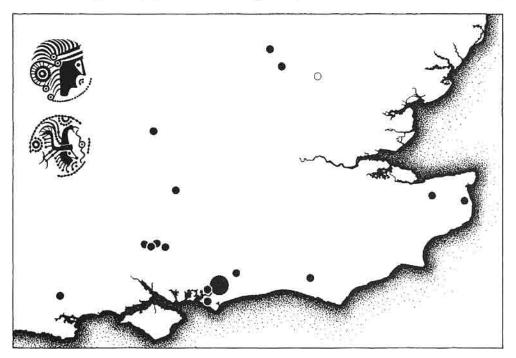
# THE 'COCK BRONZES' AND OTHER RELATED IRON AGE BRONZE COINS FOUND PREDOMINANTLY IN WEST SUSSEX AND HAMPSHIRE

G. L. COTTAM

#### Introduction

In 1992 Burnett published a group of bronze coins,<sup>2</sup> many of which had been found in the vicinity of Chichester in the previous few years, although coins of this type had originally been published by Evans,<sup>3</sup> firstly in 1858 from an example found in 'the neighbourhood of Biggleswade' and secondly in 1864 from a specimen found at Baldock, Hertfordshire.<sup>4</sup> These coins feature a 'Helmeted' head on the obverse and a 'Head surmounted by a stylised cock' on the reverse. The recorded provenances of the coins, where known to him, were all British, so Burnett attributed their production and use to Iron Age Britain.

Since the publication of Burnett's article, many additional coins of this type have been recorded, most of which have also been found in the area around Chichester (particularly from a site on the Westhampnett by-pass), further supporting Burnett's British attribution (Fig. 1). In



- single findspots
- single find with only a general provenance
- 25 individual coin finds from the vicinity of Chichester

Fig. 1. The provenances of the 'cock bronzes'.

<sup>&</sup>lt;sup>1</sup> The following is an expanded version of a paper given to the Celtic Coin Study Group on 11 December 1998, at the Institute of Archaeology, Oxford.

<sup>&</sup>lt;sup>2</sup> A. Burnett, 'A New Iron Age Issue From Near Chichester', NCirc, C/10 (December 1992), 340-2

<sup>&</sup>lt;sup>3</sup> J. Evans, 'Unpublished Types of Ancient British Coins', NC 19 (1858), 70 and plate 12.

<sup>4</sup> J. Evans, The Coinage of the Ancient Britons (1864), p. 119.

addition to these 'cock bronzes', several coins of a subsidiary variety which has a 'horse' as its reverse type, a variety which was also noted by Burnett in his review,<sup>5</sup> have been discovered in the same area (Fig 2).



- single findspots

Fig. 2. The provenances of the 'horse' variant bronzes.

# Problems associated with the Study of British Iron Age Bronze Coins and the Methodology Used

Burnett pointed out that 'A number of die links have been noted, suggesting that the issue was not particularly large. The very poor condition of the coins, however, precludes a systematic die study.' However, putting Burnett's comment about the coins' state of preservation into context, the condition of these coins is very similar to (possibly even somewhat better than) that of the vast majority of bronze or copper Iron Age coins which have been found in Britain. This has made the study of the dies from which the various issues of base metal coins of the British Iron Age were struck extremely difficult.

Most ancient base metal coinages appear to have represented low or token values<sup>8</sup> and to have functioned as small change. Prior to being lost or concealed, many such coins were subjected to heavy circulation wear, and unless they were hoarded<sup>9</sup> or experienced exceptional ground condi-

<sup>5</sup> Burnett, as in n. 2, Nos. H1 and H2.

<sup>6</sup> Burnett, as in n. 2, 342, footnote 3.

<sup>&</sup>lt;sup>7</sup> The condition of most Iron Age coins in museums or recorded in the Celtic Coin Index at the Institute of Archaeology, Oxford, creates a false impression of the average condition in which Iron Age bronze coins are found. In both cases, a high degree of selectivity has taken place either in the choice of coins that enter museum collections or as a result of the inability of the average finder to identify poorly preserved coins and deem them worthy of reporting to the Celtic Coin Index.

<sup>&</sup>lt;sup>8</sup> As is the case with most modern base metal coinages. Note, however, that there are both 'modern' and ancient base metal coinages that are exceptions to this general rule, eg the 'cartwheel' issues of Matthew Boulton of the Soho mint or plate money of Sweden, the face values of which corresponded to their intrinsic value in copper, or the Acs Rude and Acs Grave issues of early Rome, the values of both of which would appear to have been equivalent to the intrinsic value of the bronze from which they were produced.

<sup>&</sup>lt;sup>9</sup> Many Roman base metal coins that were deposited in hoards survive in far better condition than they do as single coin finds, owing to the coins in the centre of a hoard being partially protected when the oxygen necessary for corrosion to proceed is scavenged from around them as a result of sacrificial corrosion of the outermost coins in the hoard.

tions leading to the formation of a smooth, continuous patina, <sup>10</sup> chemical attack of the base metal from which they were struck is likely to have further degraded their surfaces while they were buried. Consequently, a high proportion of the extant specimens of ancient base metal coins of types that do not appear to have been hoarded <sup>11</sup> have surfaces that are heavily worn or corroded. When such coins are photographed, scoring, rough corrosion products or variability in the colour and surface appearance of the patina, along with differences in intensity and direction of the illumination relative to the coins, often obscures details of the designs. This can present serious difficulties in the study of scarce types if key coins are not now available for study. In order to minimise such problems the following procedure was adopted:

First hand access to coins struck from different dies and die pairings was considered to be essential, so as many of these coins as possible were located and assembled for study. Die reconstructions were then created using × 8 photocopies of photographs of the coins. <sup>12</sup> After a detailed comparison between the photographic/photocopy images and coins struck from relevant dies, where these were available, the design features were outlined on the photocopies. <sup>13</sup> These outlines were then traced onto paper. <sup>14</sup> Many of the coins are heavily patinated, corroded or were struck from worn or blocked dies, and variation in the lighting used to photograph them has resulted in apparent differences in the position of the edges of the same feature on coins struck from the same dies. Lines outlining design features on the die reconstructions therefore depict an 'average' edge for each feature.

Considerable variability was found in the relative position of design details on different dies. Consequently, unless the faces of coins were very heavily worn or corroded, identification of the dies used to strike them was found to be relatively straightforward and could be determined in a high percentage of cases. <sup>15</sup> On several poorly preserved/poorly recorded coins, features that are only partially visible indicate that that they were struck from otherwise unrecorded dies. Details of the reconstructions of these dies are inevitably less accurate than would be desirable and may require further work if and when better specimens of coins struck from these dies are discovered. <sup>16</sup>

To date, fifty-five 'cock bronzes' have been recorded (possibly fifty-four if, as Allen suspected, numbers 2 and 3 listed by Burnett are the same coin). There are thus 110 die impressions on these coins to be identified against the dies that produced them. Of the fifty-five recorded coins, five have not been seen either at first hand or in some form of reproduction, reducing the number of die impressions that could be identified to 100, of which ninety-six have been identified with greater than fifty per cent confidence, whilst ninety-two of the 100 have been identified with complete confidence.

Six of the 'horse' variety bronzes have been recorded, of which eleven of the possible die impressions have been identified with complete confidence (92 per cent).

<sup>10</sup> A large number of the bronze or copper coins of Cunobelin and Tasciovanus that were excavated from undisturbed contexts at Harlow temple are in an excellent state of preservation, although the condition of similar types of bronze or copper coins from more disturbed contexts, or from somewhat different ground conditions on the same site, is significantly poorer.

- "Thereby confirming their use as small change people tend to hoard money in the most valuable denominations that are available to them. Although hoards of base metal small change are known, they are the exception rather than the rule. The only Iron Age bronze coins definitely known to have been hoarded in Britain are either the early potin issues from SE England or the struck or cast bronze coinage of the Durotriges. In addition to these types, a single group of bronzes was found at the bottom of a sealed pit during the 1930–9 excavations at Colchester and may also have been a hoard. See C.F.C. Hawkes and M.R. Hull. Camulodinum, First Report on the Excavations at Colchester 1930–1939 (London, 1947) pp. 101 and 140.
  - 12 The only available records of several of these coins are half tone reproductions from dealers' catalogues.
  - <sup>13</sup> At ×8 magnification, any small errors in the position of this outline are relatively insignificant.
- 14 The relatively high translucency of photocopier paper compared with that of photographic paper greatly facilitates the tracing of design features on a light box.
- 15 Both dies have been identified with greater than fifty per cent confidence on fifty-four of the sixty-two coins so far recorded (both 'cock' and 'horse' variants) and with complete confidence on fifty-one of these coins.
- <sup>16</sup> In particular, obverse die numbers 2, 9, 12 and 3' and reverse dies g, j and c', recorded below, will probably require further detailed adjustments to some of the edges of features already recorded when new examples of coins struck from these dies appear. Only photographs of the one recorded coin struck from obverse die 10 and reverse die h were available for study, so it is likely that some modifications will need to be made to the die reconstructions if the coin itself becomes available for study or further examples of coins struck from the same dies appear.

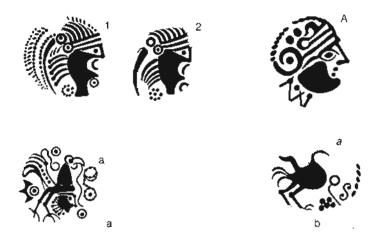


Fig. 3a. TYPE 1 coins; Fig. 3b TYPE 3 coins: Obverse and reverse dies.

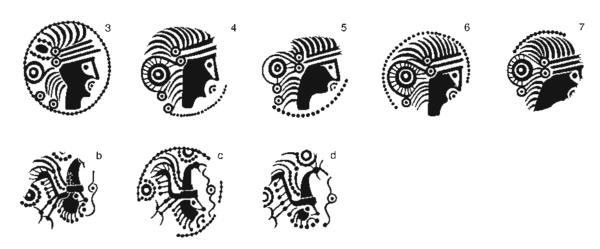


Fig. 4. TYPE 2 coins: group 1 obverse and reverse dies.

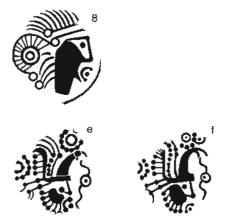


Fig. 5. TYPE 2 coins: group 2 obverse and reverse dies.

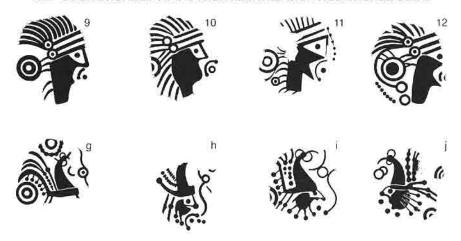


Fig. 6. TYPE 2 coins: group 3 obverse and reverse dies.

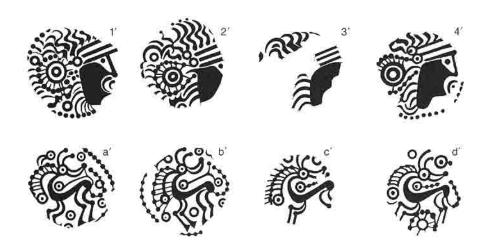


Fig. 7. TYPE 4 coins: Obverse and reverse dies.

#### The Die Analysis

Burnett's review would suggest that, with the exception of the variety with a 'horse' on its reverse, the 'cock bronzes' form a relatively homogenous issue. However, analysis of the dies that were used to strike the enlarged corpus of specimens now recorded has shown that there are, in fact, three distinct types, although two of these are very rare. Reconstructions of the different dies used to strike each of these types together with those used to strike the 'horse' variety are shown in Figs. 3-7 at  $\times 1.4$  magnification:

**TYPE 1** (Fig. 3a) is currently represented by just two recorded coins which are reverse die-linked (Fig. 8). <sup>17</sup> Only one of these, which is in rather poor condition, was available to Burnett and published by him (No. 21). The second, a better preserved coin, is illustrated in Fig. 9 at ×2 magnification. These coins differ from the remaining coins illustrated by Burnett in the following key respects:

<sup>&</sup>lt;sup>17</sup> Although the coin of this type illustrated by Burnett is very worn, eareful comparison between its reverse and that of the previously unpublished coin of this type would indicate that, to a very high level of confidence, they were struck from the same reverse die.

The representation of the head on the obverse is of a different style and has its neck flanked by a rosette of pellets to the left and a pellet-in-ring motif to the right.

A broad line extends down in an arc behind the curved lines representing hair on the nape of the neck and has a pattern of similarly shaped arcs of pellets behind it.

The cock on the reverse has a relatively natural appearance, particularly in its legs and head, which has an outlined beak and wattles.

A motif formed from a pellet-in-ring motif nested in the right hand side of a three-lobed device appears behind the cock's legs.

Neither coin exhibits any evidence to indicate whether the edges of either obverse or reverse designs were outlined in any way, although this may be due to the designs being larger than the struck coins and the relative position of the dies on the blanks when they were struck. The existence of two obverse dies with common design features that are significantly different from those on the dies used to strike the rest of this series, plus the differences on the reverse die associated with them, suggests that these coins constitute a distinct variety, rather than being merely a consequence of die cutting variability.

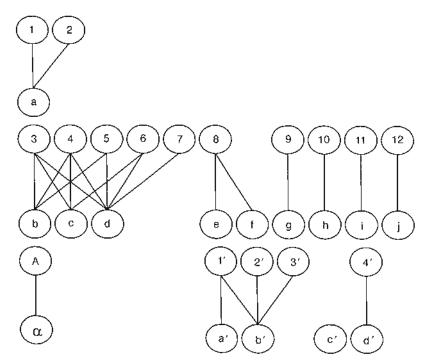


Fig. 8. Die Links recorded for the various bronze issues.



Fig. 9. One of the two recorded TYPE 1 'cock bronzes'. 18

<sup>&</sup>lt;sup>18</sup> Photographs of bronze and silver coins from British finds are by courtesy of the Oxford Institute of Archaeology's Celtic Coin Index.

**TYPE 2** (Figs. 4–6) This is a large issue of coins struck from a minimum of ten obverse and nine reverse dies. Coins of this type fall into three relatively well defined groups, analysis of which gives an insight into the rate at which they were produced and the extended period over which this might have taken place.

# Group 1 (Fig. 4)

A minimum of five obverse and three reverse dies were used to strike the first group of type 2 coins and a high proportion of possible obverse/reverse die combinations has been recorded (Fig. 8). The dies are all competently cut and two coins, struck from the same reverse die (die b), 19 exhibit clear evidence of an attempt to represent feathering on the cock's neck (Fig 10b). 20 Two distinct obverse variants are known, one of which is represented by only a single die (die 3; Fig. 10a). Key areas of difference between the two obverse varieties are:

The shape of the neck. On die 3 this curves in at the nape as on the group 1 dies (Fig 8a and b). On dies 4–7 there is no incurve at the nape of the neck.

The back of the helmet. On die 3 there is a large oval pellet behind the head enclosed by two beaded arcs and, below it, two concentric circles. On the other group I dies the beaded arcs and pellet are replaced with further curved lines, while several short radial lines stretch from the outermost of the two concentric circles to a line which extends round them and terminates at the two pellet-in-ring motifs on the temple.

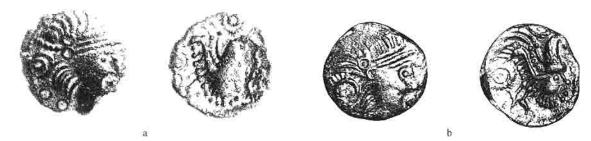


Fig. 10. TYPE 2 coins struck from the two different group 1 obverse die variants.

Designs on both obverse and reverse dies of this group are enclosed by either a beaded line or a ring of closely spaced pellets (although this cannot be confirmed for die d), the shape of which, where it can be determined, diverges from an accurate circle by no more than the diameter of the pellets used in its construction, suggesting that compasses were used to scratch a circular line on the die and pellets were then punched around it.

## Group 2 (Fig. 5)

These coins were struck from one obverse and two reverse dies which are not linked to the coins of group 1, although they are stylistically very similar to them, suggesting that the dies were probably cut by the same craftsman. Note that parts of the reverse design are progressively simplified from the most carefully cut group 1 dies (b and c), through die d to the dies used to strike group 2 coins (e and f) and this may be an indicator of the sequence in which these dies were cut.

Although the evidence is less complete than on group 1 coins, it confirms that the design on the group 3 obverse die was enclosed by either a beaded line or a ring of closely spaced pellets. However, there is no evidence that the design on either of the two reverse dies was outlined in a similar manner (this is the same as for die d and may also be indicative of the cutting sequence).

<sup>19</sup> See Burnett, as in n. 2, photograph 340 and No. 17.

The feathering is not very clear on photographs, but can be seen on the coins themselves.

Group 3 (Fig. 6)

Five coins of this group are known, struck from four pairs of dies, none of which link with any other die pair of the group (Fig. 8). Individual dies from which these coins were struck are stylistically different from and, in most cases, less competently cut than the dies used to strike group 1 and 2 coins. In addition, they differ from them in a variety of design details (eg differences in the shape of the cock's head or the human head below the cock). Evidence of at least two new hands, possibly three, can be detected in the cutting of the designs on these dies, one of which (die j) is laterally inverted.

Only two group 3 coins show any evidence of a beaded ring surrounding the design on either of the dies from which they were struck and in both cases this is on the obverse (dies 11 and 12). Although it has not yet been possible to extend reconstructions of the reverse dies from which the coins of this group were struck to all the edges of the designs they bore (where a beaded circle may have existed), one of the coins struck from reverse die g does have a significant area of its flan extending to the left of the cock's tail and the circular motif below it, while the flan of the coin struck from die h extends well to the right of the motif in front of the cock. Nevertheless, no evidence of encircling lines can be seen on these coins, suggesting that none were present on the dies. However, it should be noted that, when several of the coins struck from reverse dies d-f are viewed under low angle illumination, the surface of the flan which is outside the design can be seen to be raised in the form of a low circular ridge which exhibits no evidence of any surface structure. Usually this ridge is visible for only part of its circumference owing to the position of the design on the flan. The ridge is particularly noticeable on Burnett's coins No. 3, 13 and 28 where, in places, it is between 1 and 2 mm high. It is probable that this ridge records the edge of the die and that the ring of pellets that encircles the design on reverse dies b and c is omitted from the other Type 2 reverse dies.

**TYPE 3** (Fig. 3b) is represented by a single coin found near Chichester. Although the coin is superficially similar to the rest of the 'cock bronzes', the style and details of its obverse and reverse designs differ significantly from them. At this stage, it cannot be confirmed that the coin is British. Nevertheless, it has a British provenance and no coin of an identical type with a continental findspot has yet been located, so it is likely that the coin was produced in Britain and, accordingly, it has been included in the die study for completeness

The presence of beaded circles surrounding both obverse and reverse designs on this coin can clearly be seen.

**TYPE 4** (Fig. 7) In addition to the coins listed above, there are several bronze coins which, although they were found in the same area as the 'cock bronzes' do not feature a head surmounted by a cock as their reverse type. However, they are a well defined group and, as Burnett pointed out, are clearly related to the 'cock bronzes' by the similarity of their obverse type (Figs. 7.1' and 11a) to the one that appears on Types 1 and 2 above, although there are several key differences between the two obverse designs:

The top of the head on Type 4 coins is represented by a series of wavy lines that closely resemble hair.

The smooth line that encloses the concentric circles behind the head on Type 2 coins is replaced by a line of pellets or beaded line.

Pellet-in-ring motifs that appear on Type 2 coins are reduced in number and, in some cases, replaced by annulets.

A second curved line is added below the nose on Type 4 coins (Fig. 11a) possibly representing a moustache.

The design on the reverse of Type 4 coins depicts a quadruped with its head turned back over its body and a flamboyant mane. The areas on the die around the animal are filled with pellet-in-ring motifs and 'strings of beads', each of which is produced from a row of pellets linked by a line. Burnett suggested that this animal was possibly intended to represent a 'horse' and the hoof-like





Fig. 11. The bronze coins of the 'horse' variety.

shape of the animal's feet on one excellently preserved example of this type would certainly support this view (Fig. 11b). To date, only six coins of this variety have been recorded (two of which were published by Burnett)<sup>21</sup> and these were struck from at least four obverse and four reverse dies (Fig. 7).<sup>22</sup>

On three obverse and two reverse dies, there is evidence that the designs were enclosed by beaded lines or rings of closely set pellets, suggesting that this was the norm for the dies from which this issue was struck.

## Discussion

Burnett suggested that 'The cock with a human head on the bronze is derived from a bronze produced in northern Gaul and attributed to the Bellovaci'. Several features on Type 1 coins appear to confirm that this type was their model, rather than any of the other Gaulish bronzes bearing representations of cocks that Burnett listed. In particular, Type 1 coins feature a naturalistic cock which has a loop terminating the end of its lower tail feather and a row of pellets representing a second feather adjacent to it (Fig. 3 die a). These features are similar in appearance firstly to two feathers which curve together in an identical position to the loop and secondly to an adjacent row of pellets, both of which appear on the coin that Burnett cites as the most likely model for these bronzes (Fig 12a), but which are not seen on any of the other northern Gaulish bronzes. Coins of Types 1 to 3 also feature a similar row of pellets, although they exhibit some of the characteristics (particularly in the stylisation of cock and head below it) that appear on a different Gaulish type<sup>24</sup> from the one on which group 1 appears to be modelled (Fig. 12b). However, it is possible that Types 1 and 2 may have been derived from both of the Gaulish types cited above.

Burnett also suggested that the obverse of these coins was ultimately derived '- from the head of Roma on Roman denarii' and the correspondence between the obverse type of the 'cock bronzes' and the head of Roma on some Republican denarii is, indeed, quite close (Fig. 13a). The three parallel lines that represent the peak on Roma's helmet appear in an equivalent position across the forehead on the 'cock bronze' obverse, while a pellet-ended curl at the left hand end of the peak and second pellet-ended curl that terminates the outline of the helmet bowl next to it are transformed into two pellet-in-ring motifs, from which extends a pattern that clearly has its origin in the wing on Roma's helmet.<sup>25</sup> Although the obverse of the Gaulish bronze on which 'cock bronze' reverses seems to be modelled appears to be derived from the head of Roma on such a

<sup>21</sup> See Burnett, as in n. 2, Nos. H1 and H2.

<sup>&</sup>lt;sup>22</sup> The obverse of one of the coins, H5, is so badly corroded that, although it can be confirmed that an obverse die similar to those used to strike the rest of this group was employed, the details of the design that it bore cannot be determined.

<sup>23</sup> The type to which he refers is S. Scheers. Traité de Numismatique Celtique II: La Gaule Belgique (Paris, 1977). pp. 583-4. type 111. Plate XVII 461.

<sup>&</sup>lt;sup>24</sup> See Scheers, as in n. 23, pp. 591-3, type 121. Plate XVII 474, 475.

<sup>25</sup> E.g. the head of Roma on some of the denarii of C. Ailius, which were struck in c.209-208 to (see M. Crawford, Roman Republican Coinage, I and II (Cambridge, 1974), No. 75/1a), is particularly close to the 'cock bronze' obverse, although many other Republican denarius obverse types are somewhat similar.

denarius, it is sufficiently far removed from it for us to be reasonably certain that it was not itself the model for the obverse of the 'cock bronzes'. Whether it was the obverse of a Roman denarius, a Gaulish copy of such a denarius (Fig. 13b) or one of the other Gaulish types derived from these denarii (Fig. 13c) that was to provide the model for the 'cock bronze' obverse is not known. However, several inscribed British Iron Age coins are closely modelled on Roman Republican denarius types, <sup>26</sup> so it is certain that a range of these coins (or their copies) were present in Britain at some stage between the beginning of the last quarter of the first century BC and the end of the first quarter of the first century AD, <sup>27</sup> although they may have been imported much earlier than this. <sup>28</sup> Alternatively, a range of copies and derivatives of these denarii was circulating in northern Gaul and one of these derivative types could equally well have provided a model for the obverse of the 'cock bronzes'.

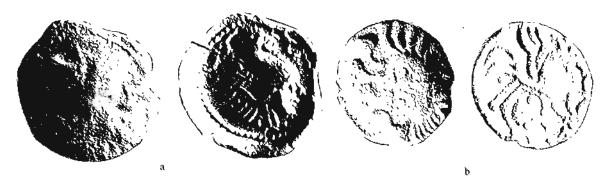


Fig. 12. Coins which were possible models for the 'cock bronze' reverse types.<sup>29</sup>

The differences between Types 1 and 2 of the 'cock bronzes' are sufficient for us to question whether they might have been produced by separate pagi from the Chichester area or, alternatively, whether there was a sufficiently long break in production between Type 1 and the remaining 'cock bronze' output to have resulted in both obverse and reverse dies being cut by a different craftsman. Whatever the case, the Type 1 issue would appear to have been somewhat limited in scope.

<sup>26</sup> See S. Scheers, 'Les imitations celtiques des monnaies romaines en Angleterre et leur signification historique', in *Proceedings of the 9th International Congress of Numusmatics, Berne 1979.* 1. Ancient Numismatics (Louvain-la-Neuve – Luxembourg, 1982), pp. 61–3; and S. Scheers, 'Celtic coin types in Britain and their Mediterranean origins', in *Celtic Coinage: Britain and Beyond* edited by M. Mays (BAR British Series 222, Oxford, 1992), p. 34; or L. Laing, 'Types and Prototypes in Insular Celtic Coinage', *Celtic Coin Bulletin* 1 (Nottingham, 1991), 19–24.

<sup>27</sup> Although, as pointed out by Colin Haselgrove in 'The Development of British Iron-Age Coinage', NC 153 (1993), 45 footnote 57, '... not a single example of a pre-Conquest Roman silver coin import is known from a securely stratified Iron-Age context', Nevertheless, the distribution of hoards of Roman Republican denarii by period shows that during the first quarter of the first century BC it is likely that Roman silver coinage was becoming available to the tribes in southern Gaul (see R. Reece, 'Roman monetary impact on the Celtic world – thoughts and problems', Coinage and society in Britain and Gaul: some current problems, edited by B. Cunliffe (London, 1981), p. 26, Fig. 10), from whence it could rapidly have entered Britain through trade, for as Reece pointed out '... while the presence of the army may mean the presence of denarii, denarii travel into the Celtic world for many different reasons beyond military campaigns'.

There seems to be no compelling evidence for significant working of silver deposits in Britain prior to the Claudian invasion. The one recorded cupellation hearth, which was excavated at Hengistbury Head, could not be confirmed as having been used for primary silver extraction and could equally well have been used for the secondary recovery and recycling of silver from scrap. See B. Cunhffe, Hengistbury Head Dorset, Volume 1: The Prehistoric and Roman Settlement, 3500 BC-AD 500 (Oxford, 1987) p. 194. Since lead is a major by-product of primary silver extraction, we might expect to see large quantities of lead artefacts on Late Pre-Roman Iron Age sites if silver was being extracted on a significant scale. Their relative rarity would argue that the silver that appears in some quantity in the Snettisham torcs (see I.M. Stead, 'The Snettisham Treasure: excavations in 1990', Antiquity Ixv, 445-4.) and later in the Iron Age coinages of Britain was imported as bullion from the continent, possibly in the form of Roman Republican denarii (something that the purity of the silver in both the early Iron Age coinages of the Atrebates and Roman denarii would support - see J.P. Northover, 'Materials issues in Celtic coinage' in Celtic Coinage: Britain and Beyond, edited by M. Mays (BAR British Series 222. Oxford, 1992), p. 256. Figure 10. and D.R. Walker, The Metrology of the Roman Silver Coinage. I (BAR Supplementary Series 5. Oxford, 1976) p. 5. plus Figures 1-3.).

29 Photographs of Gaulish coins are by courtesy of Simone Scheers.

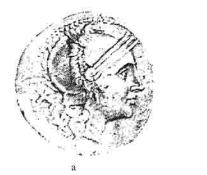






Fig. 13. Possible models for the 'cock bronze' obverse types.30

By contrast, the first group of Type 2 coins, struck from at least five obverse and three reverse dies, with evidence of extensive linkage, must have represented a much greater output from the mint. The pattern of die linking indicates that at least three pairs of dies were in use concurrently, with a die box being used for overnight storage. Dies 3 and 4, which are linked to all three reverse dies, were probably two of the obverse dies initially put into use, along with either die 5 or die 6. As obverse dies wore out or were damaged,<sup>31</sup> they would appear to have been augmented firstly by whichever of dies 5 and 6 was not originally in use and, finally, by die 7. Die 3, although differing in design from the other obverse dies of this and subsequent groups of 'cock bronzes', is stylistically quite similar to them, although more carefully cut. If this was the first group 2 die cut, its design could be a link with the obverse design on Type 1 (reflected in the shape of the neck and the beaded lines seen on the back of the head). In this scenario, die 3 may have been put into use with one of its associated reverse dies (possibly die b, which is very finely cut and exhibits feathering on the cock's neck). It may then have been realised that the volume of coinage required from the mint could not be achieved with one pair of dies, and additional obverse dies of somewhat differing design and care in execution may then have been hurriedly produced, together with associated reverse dies, to enable output to be increased. Unfortunately, however attractive this explanation may appear, it has so far proved impossible to determine whether die 3 was the first to be cut or whether its design was merely the consequence of idiosyncratic behaviour by the die cutter. Alternatively, the differences seen between die 3 and all other 'cock bronze' obverse dies of groups 1-3 may be due to some other circumstance about which we have no knowledge. However, the most interesting aspect of this group of coins is the concurrent use of three pairs of dies in their production. This would suggest that, at the time that these coins were being struck, there was a pressing need for significant quantities of coin that could not be met by the sequential use of paired dies.

There would appear to have been a pause in the mint's output once group 1 coins had been produced. Otherwise, when group 2 dies were put into use (obverse die 8 and, initially, one of the two reverse dies, e and f), we might have expected them to be managed in the same way as those of group 1 (with the concurrent use of up to three obverse coining anvils and associated die-box for reverse die storage). If this had taken place, then the replacement of one of the group 1 obverse dies by die 8 would almost certainly have resulted in at least one die linkage between groups 1 and 2. Similarly, the storage of one of dies e and f in the die box would have yielded the same result, something that has yet to be recorded.<sup>32</sup> Episodic production of Iron Age coins has long been sus-

<sup>30</sup> Photographs courtesy of Italo Vecchi.

<sup>&</sup>lt;sup>51</sup> The relatively high ratio of obverse to reverse dies may be indicative of poor mechanical support of the obverse dies while coins were being struck.

<sup>32</sup> The simultaneous wearing out of both obverse and reverse dies of group 2, necessitating their replacement by dies 8 and either e or f is exceedingly unlikely. However, it is possible that the rate of production slowed down dramatically towards the end of group 1 output, leaving only one pair of dies in use. In this case it is probable (but not necessary) that each die of the remaining pair would have been replaced as it wore out (as appears to have occurred before), resulting in a die link between groups 1 and 2.

pected and it is probable that this is recorded in the die structure of the 'cock bronzes'. By comparison with the output of group 1, the rate at which group 2 coins could have been produced will have been significantly lower, with only one obverse die now in use, suggesting that the pressure to mint large quantities of coin was now much reduced. Nevertheless, group 2 dies are similar in style to those of group 1, were probably cut by the same individual who was responsible for them and are likely to have been produced within a relatively short period of the end of group 1 output.

Comparison between the coins of groups 1 and 2 and those of group 3 reveals significant differences both in style and in the details of both obverse and reverse designs. Dies used to strike the five recorded coins of group 3 appear to have been cut by several different hands, and obverse and reverse dies are strictly paired. If these coins were produced by the same people who produced groups 1 and 2, it is likely that the production of 'cock bronzes' had now been reduced to a relative trickle, with different (and in some cases less competent) craftsmen being tasked with the production of new pairs of dies. It is also likely that the production of the dies used to strike group 3 coins took place over a longer period of time than that required to produce the dies used to strike groups 1 and 2; otherwise we would not have expected to see evidence of more than one additional hand involved in their creation.



Fig. 14. The TYPE 3 Bronze coins.



Fig. 15. Possible models for TYPE 3 bronze coins.

As noted above, the Type 3 bronze coin is stylistically very different from the rest of the cock bronzes and its reverse appears to have taken a different Gaulish coin as its model. The Gaulish bronzes that it most closely resembles are two additional types (Fig. 15)<sup>33</sup> which, on the basis of their provenances, would appear to have circulated in a region similar to or near that in which the putative models for the 'cock bronze' coinage circulated. Features on the reverse of these coins which are similar to the Type 3 coin, but differ from those on the bronzes that provided models for Types 1 and 2, are:

The treatment of the cock, which is much less stylised than it is on the other Gaulish bronzes and is free standing, rather than being mounted on a human head.

<sup>&</sup>lt;sup>33</sup> See Scheers, as in n. 23, pp. 574-5, type 107. Plate XVI.450 or pp. 581-3, type 110. Plate XVI.459.460. For a coin of the second type found in Britain see Coin Register in *BNJ* 62 (1992), 204 No. 18 plus Plate 25.18.

The scroll which sits in front of the bird in addition to the normal ring located in the centre of a sinuous line.

The pattern of lines and rosette of pellets under the bird, which replace the human head.

Although the obverse of the Type 3 coin is superficially similar to the design on the rest of the 'cock bronze' series, it is more heavily cut and much of the detail that appears on Types 1 and 2 has either been greatly simplified or is missing. Nevertheless, the obverse still appears to have been derived either directly or indirectly from a coin similar to the one on which the 'cock bronzes' were modelled (possibly even from the 'cock bronzes' themselves).

It is not known whether the six recorded bronze coins of Type 4, which have a 'horse' depicted on their reverse, were minted by the same people responsible for the production of the 'cock bronzes', although no significant difference can be detected between their respective distributions (Figs. 1 and 2). Stylistic differences between their obverse type and that of Types 1 and 2 would suggest that the 'horse' variety dies were cut by a different hand from that responsible for any of the 'cock bronze' dies. Unlike the 'cock', the 'horse' does not appear to be derived from any of the northern Gaulish bronzes that might have been available when the dies were cut, although there is no fundamental reason why an indigenous design should not appear on these coins. Three of the coins are die-linked and this, when taken with the number of dies recorded, would suggest that the volume of coinage that they represent was somewhat smaller than that of the 'cock bronzes'. However, it would still have been significant in comparison with that of most of the early silver issues that are recorded as having been minted in this region. The specific depicted on the cock bronzes is the tare recorded as having been minted in this region.

The arguments that Burnett offered as support for his proposition that the 'cock bronzes' were produced some time in the mid or late first century BC still seem reasonable, 36 notwithstanding the fact that it is doubtful whether the silver minims that he used as an indicator of date can be attributed to Caesar's COMMIOS. 37 Nevertheless, the absence of any form of a legend, and the fantastic forms of the designs these coins bear, are characteristic of the earliest period of coinage in Britain.

<sup>34</sup> An estimate of the number of dies used to strike these coins can be made using formulae developed by several researchers. See, for example, W.W. Esty. 'Estimation of the size of a coinage: a survey and comparison of methods', NC 146 (1986), 185–215; and S. Lyon, 'Die Estimation: Some experiments with simulated samples of a coinage', BNJ 59 (1989), 1–12. Using Lyon's first formula, an estimated thirteen to fourteen obverse and eleven to twelve reverse dies were used to strike the 'cock bronzes', whilst eight obverse and eight reverse dies are indicated for the 'horse' variety. If these numbers can be believed, then the low number of surviving 'horse' bronzes (six) compared with the survival rate of 'cock' bronzes (fifty-five), might seem surprising, although it is similar to that of the Type 2 group 3 coins, suggesting that the relatively large losses of Type 2 'cock' bronzes of groups 1 and 2 (particularly of group 1) are associated with a specific set of economic conditions or some particularly intensive activity involving their use (probably the same conditions/activities that originally created the need for their rapid production). Conversely, the 'horse' coins may have been produced during the same period that saw the production of Type 2 group 3 coins, when a reduced intensity in the usage and/or changed economic conditions could have resulted in the lower loss rates that are recorded as finds.

<sup>35</sup> See S.C. Bean, *The Coinage of the Atrebates and Regni*. PhD thesis, University of Nottingham (1994), p. 92. Fig. 2.8; p. 184, Fig. 3.27; p. 186, Fig. 3.28; p. 190, Fig. 3.29; p. 193, Fig. 3.30; p.195, Fig. 3.31; p. 197, Fig. 3.32. It is important to note that none of these silver issues shows any evidence of extensive die linkage, suggesting that the circumstances leading to the production of bronze coins differed markedly from those that led to precious metal coinage in this region.

<sup>36</sup> Sills has made a very convincing case, based on British A staters only being associated with the hoards of Gallo-Belgic E staters found in Britain when the last type of these staters is present, that British gold coinage only commenced around 45 BC (unpublished paper read at a Celtic Coin Study day at the Institute of Archaeology, Oxford, 11 December 1998). However, it is generally accepted that the potin coinage of Kent significantly precedes the indigenous struck coinage of gold and there is no fundamental reason why a mid first century BC date for the production of the 'cock bronzes' would be untenable.

<sup>37</sup> See D.F. Allen, 'The Belgic Dynasties of Britain and their coins', *Archaeologia*, 90, 4–5, where he points out that the chieftain Verica, who styles himself REX and COM.F on his coins, would appear to be that same person (Berikos) whom we see petitioning Rome for support in AD 43 (noted in Dio Cassius, *Roman History*, LX, 19.1). For the Commios of the coins to be the person who appears in Caesar's narrative. 'Verica must have been a son of Commius' old age, and must himself have lived to well over sixty'. However, the patronymic formula does not necessarily mean that Verica was the natural son of Commios, merely that he was acknowledging some form of relationship with him, possibly to establish legitimacy of rule – see also Caesar's comments about kinship *DBG*, v. 14. Nevertheless, S.C. Bean, as in n. 34, pp. 241–3, notes that the Commios whose name appears on the reverse of several early gold staters of the Atrebates is unlikely to have been the same person as Caesar's Commios, since one of the stater variants which carries this name (R. Hobbs, *British Iron Age Coins in the British Museum* (London, 1996) p. 85. No. 728 and Plate 27.728) also features the additional letters COM above the 'horse' which appears on its reverse, suggesting that the Commios of this stater was acknowledging some form of kinship with another person of the same name, possibly in this case the Commios of Caesar (contra R. D. Van Arsdell, 'Maddying the Atrebatic Waters', *NCirc* 104 (December, 1996) 444). Bean suggests a date of c. 30 at for the coins which are storibled COMMIOS but, if we are to accept Sills' proposition that the uninscribed coinage of Britain commenced around the end of the Gallic wars (see note 35), then this date would seem to be a little early and one closer to c.10 BC would be more likely. Nevertheless, it would appear that the production of silver minims predated the inscribed coinage of the Atrebates and Regni by some

Burnett quoted a suggestion by Colin Haselgrove that the group of 'thin silver' coins (Fig. 16, VA 1280, Mack 321) found in the vicinity of Chichester might be associated with the 'cock bronze' series. However, at the time this suggestion was made, there were no records of 'thin silver' and 'cock bronze' coins being found on the same sites and, quite apart from this, there appeared to be little similarity in die cutting style between the two groups of coins. Consequently, it seemed that there was little evidence to support such an association. Recently the situation has changed and the reverse type on a new and better preserved example of a Type 4 coin (Fig. 11, c and d) can be seen to exhibit several close similarities to the reverse on the 'thin silver' coins illustrated in Fig. 16. In particular, both designs were produced to a strictly two-dimensional format, while the body of the 'horse' on the bronzes (in particular, its rump and the way in which the hind legs join it) has a very similar shape to that on some of the 'thin silver' coins. Furthermore, the reverse images on both types are created from a series of either smoothly curving lines or 'strings of beads', while ring or pellet-in-ring motifs fill any empty spaces in the designs. Having noted the absence of any hard evidence to connect the 'cock bronzes' with the 'thin silver' types, Burnett went on to publish a further series of silver coins<sup>38</sup> that had been found on the same sites where 'cock bronzes' had been discovered and suggested that these might be related to the 'cock bronzes'. Subsequently, additional finds of these silver coins have been made on other sites where 'cock bronzes' are absent,<sup>39</sup> so what had possibly been a correspondence between the two types now seems much less clear. Nevertheless, the silver coins published by Burnett are believed to have been issued at an early stage of coin usage in southern Britain<sup>40</sup> so, although they may not be directly related to the 'cock bronzes', their association with them on sites such as the Westhampnett by-pass near Chichester, which has produced a restricted range of early silver, may also be a positive indicator of an early date for the production of the bronze coinage.<sup>41</sup>



Fig. 16. Two of the 'thin silver' coins from the West Sussex/Hampshire area. 42

(Note 37 continued)

little while since, although various uninscribed minim types have been recorded (see S.C. Bean, as in n. 34, 476–9; 480–4), some of which were found in the Ashdown Forest hoard along with type-linked silver units and early Kentish quarter staters (see J. Evans, *The Coins of the Ancient Britons* (London, 1864) p. 92), the only early uninscribed silver coins that were found at Wanborough (where minims constituted 112 out of 978 coins or something over ten per cent of the excavated portion of the deposit) are of a single typologically late issue of full units (see C. Cheesman, 'The Coins' in M.G. O'Connell and J. Bird, 'The Roman temple at Wanborough, excavation 1985–1986', *Surrey Archaeological Collections*, 82 (1994) 37).

<sup>38</sup> See A. Burnett, as in n. 2, p. 342 Nos. 1-6 and S.C. Bean, as in n. 34, p. 466. No. QT1-1 and Plate V.

<sup>&</sup>lt;sup>39</sup> A coin of this type was found at the Hayling Island temple site (see D. Briggs, C. Haselgrove & C. King, 'Iron Age and Roman coins from the Hayling Island temple', *BNJ* 62 (1992) 7. No. 16 and Plate 1.16) along with six of the 'thin silver' coins and another silver unit (see D. Briggs *et al.* as in n. 34, 8. Plate 1.17 and S.C. Bean, as in n. 34, 467–8. No. Q.T1–5 and Plate V) of a type that has also been found in association with 'cock bronzes' on the Westhampnett by-pass site near Chichester.

<sup>40</sup> See S.C. Bean, as in n. 34, 228-30.

<sup>&</sup>lt;sup>41</sup> The Le Catillon hoard from Jersey contained three of the 'thin silver' coins together with an example of a second silver type that has been found in association with 'cock bronzes' (see note 40), D.F. Allen, 'The Origins of Coinage in Britain: A Reappraisal' in *Problems of the Iron Age in Southern Britain*, edited by S.S. Frere (London, 1960) Appendix IV, pp. 297–301 and Plate XIII Nos. 16–18 and 20. Although it was originally thought that the hoard had been buried between 56 and 51 BC as a consequence of the Gallic wars, more recently there has been much debate over its deposition, with a consensus favouring a post-Caesarian date. The various arguments are summarised by C. Haselgrove in *Iron Age Coinage in South-East England The Archaeological Context* (Oxford, 1987), pp. 319–21, where it is suggested that a date soon after the Gallic war would be more likely, although nothing associated with the hoard requires its deposition date to be more precise than mid/later first century BC.

<sup>&</sup>lt;sup>42</sup> The coins illustrated were found during excavations of the Romano-British temple on Hayling Island. See D. Briggs *et al.*, as in n. 38, coin nos. 1 and 3 plus Plate 1.1,3.

The number of coins that could be struck from a single die has occasioned much debate. 43 and it has even been suggested that any attempt to estimate such a number is a meaningless exercise. 44 Nevertheless, it would not be unreasonable to attempt to estimate the output of the recorded die population based on a conjectured 'average life' of an obverse die. 45 if only to get some idea of the likely scale of this coinage. Taking a figure of 10,000 coins as the potential life of an obverse die, 46 this would give an estimate for the output of base metal coins 47 of 200,000, to which estimate we should probably ascribe a lower limit of around 100,000 and an extreme upper limit in the region of half a million. The recorded provenances of 'cock bronze' finds suggest that the primary region where these coins were in circulation/use was largely restricted to a relatively small area around Chichester that extended as far as Winchester. Given that the likely Iron Age population of this area would not have been particularly large, the volume of 'cock bronzes' that the various dies represent is relatively enormous and, whatever criteria are used to assess this remarkable output, it is of considerable interest, particularly since the majority of silver issues from the south of Britain during this period were produced using relatively few pairs of dies<sup>48</sup> and must, therefore, have been commensurately much smaller. The early acceptance of base metal as an appropriate material for the production of coins would seem to suggest that coinage was rapidly being adopted for more than either the storage of wealth or the means whereby largesse could be dispensed or debts repaid. This could possibly have been stimulated by some major change in the relationship between the British population of the Chichester area and the coin-using peoples of continental Europe, who will presumably have been involved in trade with Britain during this period. It is instructive to note what Strabo<sup>49</sup> says about Britain: 'No corresponding advantages would arise by taking over and holding the country. For at present more seems to accrue from the customs duties on their commerce than direct taxation could supply, if we deduct the cost of maintaining an army to garrison the island and collect the tribute,' and 'At present however some of the kings have gained the friendship of Caesar Augustus by sending embassies and paying him deference, ... Furthermore they submit to heavy duties on the exports to Gaul, and on the imports from there ...'. 50 If this is indicative of the developing relationship with Rome and increasing volume of trade that was taking place, then it is quite conceivable that the British tribe/s in the Hampshire/Sussex area were exacting duties on incoming goods<sup>51</sup> and requiring them to be paid in local base metal coinage, which they were obliging the continental traders to exchange for precious metal coinage at rates very favourable to themselves. If this is, indeed, the reason behind the

<sup>&</sup>lt;sup>4)</sup> Even where we have mint records, as with mediaeval England, the number of coins that could be struck from dies of the period has occasioned much discussion (eg see M. Mate, 'Coin Dies Under Edward I and II', NC, Series 7, IX (1969), 207–18, or B.H.I.H. Stewart, 'Second Thoughts on Mediaeval Die-Output', NC, Series 7, IV (1964), 293–303). Records of mint activities to the end of the first millennium are almost non-existent and, in order to get some realistic measure of die life, we are dependant either on calculations based on somewhat incomplete information (eg E.J.P. Raven, 'The Amphictionic Coinage of Delphi', NC, Series 6, X (1950), 1–22) or on experiments which recreate the processes used to produce the coins of the period. See D.G. Selwood, 'Some Experiments in Greek Minting Technique', NC, series 7, III (1963), 217–31 and plates xxiii–xxv. Unfortunately, Selwood's experiments are of particular relevance to coins of dimensions and fabric similar to Greek tetradrachms and no work has yet been done to recreate the minting process for base metal coins of the British Iron Age. Nevertheless, we can get some notion of the variability in output that dies might have exhibited from average outputs that can be computed from records of the mints of London and Canterbury in the years 1279–1327 (A. Burnett. Interpreting the Past: Coins (London, 1991), p. 46). Over this period, annual production ranged from an average of c. 2.000 to c.78,000 coins per die (and these are averages for die output over particular years, so individual outputs will have been even more variable).

<sup>&</sup>lt;sup>44</sup> See T.V. Buttrey. 'Calculating Ancient Coin Production: Facts and Fantasies', NC 153 (1993). 339–45.

<sup>45</sup> See F. de Callatay, "Calculating Ancient Coin Production: Seeking a Balance", NC 155 (1995), 296-302.

<sup>&</sup>lt;sup>46</sup> A figure of 30,000 coins per obverse die has recently been used to estimate mintage figures. See A. Burnett. 'Somerton, Suffolk, Treasure Trove', BNJ 64 (1995), 128, footnote 7.

<sup>&</sup>lt;sup>47</sup> The figure includes both the 'cock bronze' and 'horse' groups of coins and is based on twelve 'cock bronze' and eight 'horse' type obverse dies. See note 33. Group 5 has been ignored. These figures should be treated with very great caution and do not in any way purport to be an accurate view of the volume of these issues, but are offered merely as an indication of the size of this coinage.

<sup>48</sup> With the exception of the 'thin silver' group of coins. These seem to have been minted on something like the same scale as the 'cock bronzes', if the number of recorded dies is a good indicator of the scale of their production (see S.C. Bean, as in n. 34, p. 195).

<sup>&</sup>lt;sup>49</sup> Strabo lived from c.44 BC to AD 23, although much of what he wrote was derived from Posidonius who lived from c.135-c.50 BC. Some of the material was out of date when Strabo used it.

Strabo, Geography 2,5,8 (115) and 4,5,3 (200). Translation by J.C. Mann and R.G. Penman. Literary Sources for Roman Britain (London, 1978), p. 13.

<sup>51</sup> I am grateful to Daphne Nash Briggs for this suggestion.

production of the 'cock bronzes', then we should expect that a range of bronze coins that were used by the traders in their home environment would have been brought across the channel with them and become known in Britain. Given Strabo's comment that 'There are four crossings in common use from the mainland to the island, those which start from the mouths of rivers – the Rhine, the Seine, the Loire and the Garonne', 52 it is easy to see how bronze coins of the Bellovaci or Caletes could have travelled down the Seine and across to Britain in traders' 'pockets' and, once there and for whatever reason, some of these coins could have changed hands with the inhabitants who were involved in transactions with these traders. 53 It would then have been only a short step for these Gaulish coins to become models for the different reverse designs on the 'cock' bronzes.

#### The Metal of the 'Cock Bronzes'

One of the 'cock bronzes' found near Chichester early in 1992 (Burnett coin No. 22, recorded but not illustrated) was submitted to the Materials Laboratory of the University of Oxford for analysis of the alloy from which it was struck.<sup>54</sup> The composition of the coin (based on the average of five measurements) was found to be:

	Cu	Sn	Sb	Other
Percentage	88.29	8.85	1.53	1.33

The coin was thus struck from a high tin bronze containing a small but significant trace of antimony, suggesting that the alloy was probably produced from imported copper. Unfortunately, since we know nothing about how the production of this coinage was controlled, the analysis of a single coin does not prove that all coins of this series had an identical or even similar metallurgy. Nevertheless, the coin's composition is somewhat similar to that of the cast potins of the lower Thames valley and this may possibly be a further indicator of an early date for the 'cock bronze' coinage.

# ANALYSIS OF THE DIES FROM WHICH THE 'COCK BRONZES' AND ASSOCIATED ISSUES WERE STRUCK:

#### Coins which feature a cock on their reverse dies:

No.	Obverse	Reverse	Celtic Coin Index	Comments
No.	Obverse	Reverse	Celtic Coin Index	Comments

Coins illustrated by Burnett – the coin numbers refers to Burnett's illustration numbers – weights and provenances are not given where they are recorded by Burnett.

1	4	c	69.0535	
2	9	g	92.1012	Allen thought this coin was the coin from Baldock which was published by Evans (No. 3 below)
3	_	_?	<u> </u>	See 2 above
4	3	ь	90.0848	
5	5	d	91.0296	
6	5	b	91.0297	
7	7 —-?—		-	Coin not seen
8	10	h	84.0529	
9	8	e	90.0828	
10	11	i	92.1013	

<sup>52</sup> Strabo, as in n. 49, 4, 5, 2 (199).

<sup>53</sup> On the evidence of imported pottery, it has been proposed that trading was taking place between the communities of Upper Normandy and the Seine valley and the inhabitants of the Solent shores around the middle of the first century BC Sec B. Cunliffe, 'Relations between Britain and Gaul' in Cross-Channel Trade between Gaul and Britain In the Pre-Roman Iron Age, edited by S. Macready and F.H. Thompson (London, 1984), p. 9 and p. 18 Fig. 9.

<sup>&</sup>lt;sup>54</sup> P. Northover, Analysis and Metallography of Celtic Coins, No. CC120. Unpublished Report (1998).

	0.3347	0001101120	a time amountains	
11	6	d	92.1014	
12	6	d	92.1015	
13	9	g	92.1016	
14	9 3	d	92.1017	
(15)	4	Ď	92.1018	The illustration shown is coin No. 9. The details of the coin listed as No. 15 correspond to the photo- graph that heads the article.
16	3	đ	92.1019	
17	4	b	92.1020	
18	4	c	92.1021	
19		đ	92.1022	
20	3 5 2	d	92.1023	
21	2	a	92.1024	
22	2	d	=	The obverse is very badly corroded with only traces of the design visible
23	5	d	91.0542	
24	4	d	92.1025	
25	-	?—		Coin not seen
26	(6)	c	92.0515	>75% confidence in obv. die identification
27	5	d	92.0685	
28	8	f	92.0686	
29	12	j	74.0165	
Addition	al coins not list	ed by Burnett		
30	8	ė		Collection C. No weight, Found near Chichester
31	-	?—	91.0407	2.01 g. Found Worth, Kent. The coin is too cor- roded for the dies to be identified
32	-4	d	94 0758	2.06 g. Found near Chichester.
33		c	94 0784	2.28 g. Found Westhampnett by-pass, Chichester.
34	4 3 3 3	d	94 1378	Collection C. 2.20 g. Found near Chichester.
35	3	d	94 1633	2.51 g. Found NW Essex.
36	3	d	95.0588	2.54 g. Found near Wittering, W. Sussex.
37	7	ď	95 0712	Collection B. 2.19 g. Found near Chichester.
38	4	d	95.0758	Collection C. 1.87 g.
39	3	c	95.0990	2.05 g. Found near Chichester.
41		d	96.1569	2.36 g. Found near Chichester.
42	5 8	e	96.1737	2.4 g.
43	8	ř	96.3206	2.18 g.
44	n=	c ·	96.3294	No weight. Obverse die not identified due to small flan, poor condition and the record being a half-
45	(4)	(c)	96.3433	tone image.  2.11 g. Found near Chichester. Obverse and reverse die identification >50 confidence level only. Coin recorded as a ×1 magnification 200 lpi
				half tone image.
46	6	C	96.3453	2.70 g. Found near Chichester.
47	8	e	97.1484	2.15 g.
48	3	b	97.2122	1.08 g.
49	4 5	c	98.0675	No weight.
50	5	ь	98.1086	2.26 g. Found 2 miles N. of Winchester.
51	8	e	98.1087	1.85 g. Found Winnall Down near Winchester.
52	Ĩ	a		Collection C. No weight.
53	:=	?—	:5	No weight. Found Canterbury and now in Canterbury Museum, reference CB/RI (249). 55 Coin not seen.
54	6	d	98.2260	1.98 g. Excavated find from Bignor Roman Villa
55	3	b	=	2.64 g. C. Rudd list 45. no. 44.

<sup>55</sup> Personal communication from David Holmes.

Coins which feature a bird on their reverse dies and may be related to the coins which feature a cock in this position:

В١ Α

95.0713

Collection B. 2.16 g. Found near Chichester.

Coins which feature a quadruped ('horse') as their reverse type:

α

Coins illustrated by Burnett (1991)

3′ 2′ 90.0831 H2 92.1026

Additional coins not listed by Burnett

<b>H</b> 3	1'	a'	94.0960	Collection C. 2.54 g.
H4	1'	b'	-	Collection C. No weight.
H5	_	c'	_	Collection C. No weight. Found near Winchester.
Н6	4′	ď'	95.0711	Collection B. 2.53 g. Found near Chichester.

# ANGLO-SAXON AND VIKING COIN WEIGHTS

#### GARETH WILLIAMS1

In recent years, a number of lead objects have come to light which show a connection with Anglo-Saxon coinage. Either they have coins set into the lead, or they appear to have been struck using official coinage dies. They come in a variety of shapes and forms, and it is not the purpose of this paper to examine the full range of lead objects with coin associations. This has been discussed at length by Marion Archibald.<sup>2</sup> Instead, this paper will focus on those objects which appear from their size and weight to be coin weights, rather than trial pieces or customs tags, as seems more likely for the smaller, thinner strikings. Several of these weights have been discovered since Archibald's discussion of the lead objects, mostly found by metal detectorists, and while most of these (as well as the few earlier finds) have been published individually, there has been little comparative discussion.

The weights fall into two categories, which it will be argued are characteristically Anglo-Saxon and Viking respectively, although all the coins involved (with one possible exception: see below) are of Anglo-Saxon origin. The first category, which is considerably the smaller of the two, contains weights which have been struck from official coinage dies. In all four of the recorded instances, the weights were discovered in or very close to the original mint, and it is suggested that these represent official weights for coinage, possibly directly associated with the mint. An Anglo-Saxon origin seems certain for two of the four, struck respectively from dies of the 'Pointed Helmet' and 'Sovereign/Eagles' types of Edward the Confessor, since this is too late to be plausibly associated with Viking activity in England. One possible example exists of a weight of this type from Viking York in the early 940s (British Museum SCBI 1255) combining two reverses. Taken together with two lead pieces of Athelstan from York, this fits into a general pattern of continuity of minting practice in York under Anglo-Saxon and Viking rule in the mid-tenth century.<sup>3</sup> However, all three of the York pieces are of such low weight that the possibility that they are trial pieces rather than weights cannot be excluded, and they have therefore been excluded from the current listing.

The second category contains weights with coins inset at the top. Although the coins concerned are Anglo-Saxon, the weights are likely to be the products of Vikings in the British Isles. Such weights form a sub-group of typically Viking weights which use a variety of inset metalwork, often of insular origin. Furthermore, the majority of these utilise coins of the mid to late ninth century, the height of Viking activity in England, and their distribution strongly suggests Viking origins. Most have been found in the Danclaw, with two being found in a grave at Vig in Norway, and other possible examples found together with other lead weights incorporating insular metalwork in a Viking boat burial at Kiloran Bay on the island of Colonsay in the Hebrides, and, less certainly, in another Viking grave at Kingscross Point on the Isle of Arran. Two of the three certain examples found outside areas of Scandinavian settlement or authority were discovered near Wareham in Dorset, and are plausibly associated by Archibald with Viking activity in that area in 876.<sup>5</sup>

<sup>&</sup>lt;sup>1</sup> I am grateful to Marion Archibald and Susan Kruse, both of whom commented on this paper in draft, to Elizabeth Pirie and Hugh Pagan for helpful comments and references, and to Howard Simmons for drawing my attention to item no. 8. However, the opinions stated here, and any mistakes which remain are, of course, the responsibility of the author.

M.M. Archibald, 'Anglo-Saxon and Norman lead objects with official coin types', in A.G. Vince (ed.), Aspects of Saxon and Norman London 2: Finds and Environmental Evidence, London and Middlesex Archaeological Society Special Paper 12 (1991), pp. 326–46.

<sup>3</sup> Archibald, Lead objects, pp. 330, 338-9.

<sup>&</sup>lt;sup>4</sup> S.E. Kruse, 'Late Saxon balances and weights from England', in *Medieval Archaeology* 36 (1992), 67–95, at pp. 81–2; M.M. Archibald, 'Two ninth-century Viking weights found near Kingston, Dorset', *BNJ* 68 (1998), 11–20.

<sup>5</sup> Archibald, as in n. 4, p. 20.

A further case for associating this category of finds with the Vikings rather than the Anglo-Saxons is that no firm identification of a pre-Viking weight of this type has yet been made. The one possible example of such a weight known to the author was a weight in the possession of the late Dr David Rogers, which had inset a 'porcupine' penny of the early eighth century. The condition of the object did not permit a reliable estimate of the silver content nor, at our last discussion, had Dr Rogers been able to find a die-link for the coin. Unfortunately, it has proven impossible since Dr Rogers' untimely death to trace this object for further examination to establish the coin's place within the chronology of the 'porcupine' series. However, it is worth noting that coins of the 'porcupine' type are known from the excavations at Ribe in western Denmark, and that the weight was reportedly discovered in Lincolnshire, so a role for the weight in pre-Viking Anglo-Scandinavian trade cannot be excluded. Nor, given the probability that the Vikings looted longestablished treasuries in England, and the certain existence of weights with metallic insets other than coins, can the possibility that a coin no longer current was re-used during the Viking Age be safely excluded. Thus, while this weight incorporates a coin which is certainly pre-Viking, it does not provide firm evidence for the use of this type of weight before the Viking Age or in a clearly non-Scandinavian context.<sup>6</sup> Nor is any weight of this type recorded after the effective unification of England under the Wessex dynasty in the mid-tenth century.

There follows a listing of the known examples of both the putative Anglo-Saxon and Viking types of coin weights, with a discussion of weight units and function at the end of each type.

# Anglo-Saxon weights

1. Ruler: Alfred, king of Wessex (871–99)

Type: Cross and Lozenge

Moneyer: Ealdulf
Mint: London
Obverse: AELFRE DRE
Reverse: EAL DV. LF[] M[]
Weight: c.163.1 g

Provenance: Found in St Paul's churchyard, London, 1840.

Location: British Museum

The first of the coin weights to be discovered, this has been the subject of considerable discussion. The dies used are of the 'Cross-and-Lozenge' type issued by both Alfred and Ceolwulf II of Mercia, most recently dated to c.875-c.880.7 The moneyer Ealdulf is perhaps to be identified with the Ealdwulf known to have struck the unique coin of the 'Two Emperors' type for Ceolwulf II around the beginning of the 'Cross and Lozenge' type. Mark Blackburn and Simon Keynes identify at least three local styles within this type, and assign the weight to the London group, which includes coins of both Alfred and Ceolwulf.<sup>8</sup> This corresponds with the London findspot. The weight, which was well preserved when first discovered, apparently represents half a Roman pound (c.163.5 g), but it may also represent half a monetary pound, since the average weight of this issue was 1.35-1.39 g, giving a weight for 120 pennies of between 162 and 167 g.<sup>9</sup> The obverse striking has apparently been deliberately defaced with two parallel cuts across the lower bust. The reverse is also partially defaced, but it is not obvious whether this is the result of deliber-

<sup>&</sup>lt;sup>6</sup> It is also possible that this weight, if created when the coin was still current, functioned in the same way for Anglo-Saxons at the beginning of the eighth century as weights of the same type did for the Vikings in the late ninth and tenth centuries. Both periods saw interaction between monetised and non-monetised economies in different parts of England, and such weights could have played a part in the valuation of coinage of specified type within a bullion economy. Such a function would, however, have been obsolete in a purely Anglo-Saxon context by the mid-ninth century from which the majority of these coin weights apparently date.

<sup>&</sup>lt;sup>7</sup> M.A.S. Blackburn, 'The London mint in the reign of Alfred', in M.A.S. Blackburn and D.N. Dumville (eds), Kings, Currency and Alliances: History and coinage of southern England in the ninth century (Woodbridge, 1998), pp. 105-24.

<sup>8</sup> M.A.S. Blackburn and S. Keynes, 'A corpus of the Cross-and-Lozenge and related coinages of Alfred, Coolwulf and Archbishop Ethelred', in Blackburn and Dumville (eds), Kings, Currency and Alliances, pp. 125–50.

Archibald, as in n. 2, p. 335; Blackburn and Keynes, as in n. 8, p. 141.

ate defacement or corrosion. It is notable that two of the other weights of this type appear also to have been defaced.10

2. Ruler: Æthelred II, king of England (978–1016)

Type: Long Cross Moneyer: Manna Mint: Thetford

Obverse: +ÆÐELRÆD REX AI Reverse: +MA [NA] MOĐ EOD

Weight: 44.86 g Thetford, 1982 Provenance:

Location: Fitzwilliam Museum, Cambridge

Unlike the other weights of this type, the shaping of this piece is unfinished, with only one of the corners neatly rounded off. Blackburn has also suggested that the piece may have been struck from unofficial dies, arguing that neither the lettering nor the form of the bust conform to either National or Regional die-cutting styles of the period, and that the piece should be regarded as a forger's trial-piece rather than a weight. However, the piece is 7 mm thick, which seems improbably large for a trial piece, and Archibald has pointed out that at 44.99 g it is roughly equivalent in weight to thirty pennies of the same type. This is equivalent to the gold mancus, which probably existed both as a coin and as a unit of account. 12 Furthermore, like items one and three on this list, it has what appear to be deliberate gouge marks across the design, probably indicating the cancellation of its validity.

This combination of factors fits more easily with its being a weight than a trial-piece, even if the official status of the dies used is questionable. Since it is uncharacteristically rough, Archibald has suggested that it may have been unfinished, having been rejected as inaccurate for the weight required.<sup>13</sup> An alternative possibility, given the cancellation marks, is that remained unfinished because it was only created just before the end of the type, and had not been completed before the renovatio made it obsolete. Alternatively again, if the moneyer who produced the weight was using unofficial dies, as Blackburn suggests, this would be consistent with a lack of quality in the production of the weight itself. Whatever the official status of the piece, however, the characteristics it shares with the other objects of this type seem sufficient to justify its inclusion in the group.

3. Ruler: Edward the Confessor, king of England (1042–66)

Pointed Helmet Type:

Moneyer: Æstan Mint: Winchester Obverse: +EDPER. / D REX Reverse: +ÆSTAN ON PINCESTI

Weight: 37.66 g

Provenance: Excavations at Middle Brook Street, Winchester 1953

Location: Winchester City Museum

Michael Dolley noted that the obverse of this piece came from the same die as BMC 1412, and the reverse from the same die as BMC 1406. He also noted the proximity of the find spot to the mint on the reverse die, and accordingly interpreted it as a trial-piece. 14 Again, however, it is considerably thicker than most of the putative trial-pieces at 5 mm, and at 37.66 g also the equivalent of a mancus of thirty pennies of the type. Furthermore, it shares the characteristic with items one and

<sup>&</sup>lt;sup>10</sup> Archibald, as in n. 2, p. 338.

M.A.S. Blackburn, 'A Lead Striking of an East Anglian Variant of Stephen's Type 1', NC 153 (1993), 215–17.

<sup>12</sup> Archibald, as in n. 2, p. 335-

<sup>&</sup>lt;sup>13</sup> Archibald, as in n. 2, p. 335.

<sup>&</sup>lt;sup>14</sup> R.H.M. Dolley, 'A piedfort lead trial-piece of Edward the Confessor', BNJ 27 (1953), 175-8.

two on this list of having the obverse apparently deliberately defaced. It therefore fits more obviously into this small group of coin-weights better than it does the broader group of trial-pieces.<sup>15</sup>

4. Ruler: Edward the Confessor, king of England (1042–66)

Type: Sovereign Eagles

Moneyer: Ælfwine Mint: Winchester

Obverse: \_\_DV\_A\_D\_EX\_ANGL\_ Reverse: +ÆLFPINEONPINCES

Weight: 32.89

Provenance: M/D find from Abbot's Barton, near Winchester, 1998

Location: Winchester City Museum

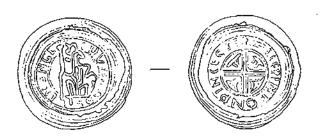


Fig. 1

The only one of this group not previously published, this piece has recently been acquired by Winchester City Museum, with the registration WINCM:ARCH 4893. The condition of the surface does not lend itself to photography, and a drawing by Nick Griffiths has accordingly been supplied instead (see Fig. 1). The surface of the piece is worn, but it appears to have been struck from the same dies as BMC 1441 and BM 1915, 5–7, 2568. At 32.89 g, it appears to represent a weight of twenty four pennies, or two shillings. Both the die duplicates weigh 1.38 g, which would give a weight of 33.12 g for twenty four. This marginal discrepancy seems perfectly acceptable, since the piece, although the surface is slightly worn and battered, is substantially intact and well-preserved, and therefore seems likely to have lost only a little of its original weight.

### Weight Units

In all four cases, the weights appear to correspond with plausible multiples of their respective penny types. With the exception of the Alfred weight, they do not fit well with contemporary weight units based on pounds, marks and ounces, but to more flexible units of account. Items two and three seem to represent the mancus of thirty pennies, while item four is apparently based on the shilling of twelve pennies. The Alfred weight is consistent with a variety of different accounting systems, possibly reflecting London's mixed status in the 770s as an interface between the monetary systems of Mercia, Wessex and the Vikings. As mentioned, it seems to correspond both to half a Roman pound and to 120 pennies. This is divisible into the mancus of thirty pennies, the shilling of twelve pennies, the earlier Mercian shilling of four pennies and the earlier Wessex shilling of five pennies. Furthermore, it is only fractionally over six Viking ounces, based on the Dublin *eyrir* of 26.6 g. 16 It is impossible to state with certainty which of these possible units was

<sup>15</sup> Archibald, as in n. 2, pp. 335, 340.

<sup>&</sup>lt;sup>16</sup> A variety of terminology for the ounce is used in the literature concerning Viking-Age weights. I have used Old Norse *eyrir* (pl. *aurar*) throughout, but other authors use the forms *ora*, *ore* or *øre*. All these refer to the ounce. A further unit at a third of an ounce is given here as *ertug* (pl. *ertugar*), but is sometimes given elsewhere as *ortug/ortugar*. A variety of weights have also been suggested for the *eyrir*, and the approach adopted here is to note correlations between the individual weights listed here and any of the possible weight standards. The problem of the different weight standards is discussed more extensively in a separate section following the listing.

the intended one, or whether it was deliberately created to function within a variety of standards. Nevertheless, it seems likely in the context of the other pieces that its main function was to measure out pennies of the 'Cross and Lozenge' type. However, in all this one should note that Susan Kruse has expressed concern about whether it is appropriate to argue for such precise relationships between coins and weights, given that lead is seldom very well preserved.<sup>17</sup>

#### Function

Despite this caveat, all four pieces apparently have weights relating to their respective coin types, and all were found in close proximity to the appropriate mint towns, which strongly suggests that weights of this group had an official function at the place of minting. The most likely explanation is that they were used to weigh out set numbers of coins of average weight within a particular type. The cancellation marks on three of the four pieces suggest that they had a fixed currency period, and it is tempting to link this with the *renovatio*, since the image on the weight would obviously be immediately comparable with coins of the current type.

# Viking weights

5. Type: Series E ('Porcupine')

Moneyer: – Mint: –

Weight: 17.54 g

Provenance: M/D find, believed to be from Lincolnshire.

Location: In the collection of the late Dr Rogers, shown BM 1997



Fig. 2

As discussed above, this is the only weight in the 'Viking' group to utilise a pre-Viking coin (see Fig. 2). It also differs from the other weights in the group in that while the rest are basically truncated cylinders, this one is more pebble-shaped, with rounded edges rather than vertical side. The possibility that this weight may be pre-Viking cannot therefore be excluded. The use of a coin of a type which is probably Frisian, but which circulated in England and western Denmark as well as Frisia further complicates matters, and it is possible that this weight dates from the period of immediately pre-Viking trading activity in the North Sea area. However, it may simply represent later re-use of a pre-Viking coin. At 17.54 g, the weight is plausible, if marginally on the heavy side, as two *ertugar*, or two-thirds of a Viking *eyrir* of 26.6 g. Since the weight is apparently well-preserved, it has probably not changed very significantly from its original weight.

6. Ruler: Possibly Eanred, king of Northumbria

Type: Styca Moneyer: Herred

Weight: 18.15 g when found.

Provenance: Vig, Fjære, Aust-Agder, Norway, 1876 Location: University Museum of Cultural History, Oslo

<sup>17</sup> Kruse, as in n. 4, p. 85.

This was found in a Viking grave together with item 7 below and, *inter alia*, two other weights of other types and a soapstone mould for casting ingots. Only the reverse of the coin is visible, but since item 7 has a coin of Eanred of Northumbria inset, and Herred is a known moneyer of Eanred, Skaare argued that this was also a coin of Eanred. The weight was damaged when found, and has since deteriorated further, making it difficult to estimate the original weight of the piece. Skaare suggested that it might possibly originally have represented an ounce. Assuming that the two weights were produced together, he argued that the fact that one weight shows the obverse of the coin while the other shows the reverse indicates that the person producing the weights was seeking decorative variation, and that the function of the coin insets was purely decorative, in keeping with the broader group of weights with insets of insular metalwork.<sup>18</sup>

7. Ruler: Eanred, king of Northumbria

Type: Styca

Moneyer:

Weight: 10.45 g when found

Provenance: Vig, Fjære, Aust-Agder, Norway, 1876

Location: University Museum of Cultural History, Oslo

Found together with item 6, this weight was also damaged when found, and has since deteriorated. Skaare suggested that the original weight may have represented half an ounce. 19

Ruler: Probably Eanred, king of Northumbria

Type: Styca Moneyer: Monne

Obverse: -

Reverse: +[MO]NNE Weight: 18.25 g

Provenance: M/D find, near Faversham in Kent, 1996

Location: Simmons Gallery, (sale pending at time of press)<sup>20</sup>



Fig. 3

Only the reverse of the coin is visible, and around a quarter of the coin is missing (see Fig 3). Although this means that part of the legend is obscured, it is clearly a coin of the moneyer Monne, who struck in large quantities for both Eanred and Æthelred II. Although it has not been possible to match the die, it seems probale that it is a coin in the name of Eanred, since coins of Monne in the name of Æthelred II typically (although not exclusively) have the first N of the moneyer's name reversed. Apart from the missing fragment of the coin, the weight has also suffered some corrosion, taking the original weight to somewhere around 20 g or a little over. This is too light to represent an *eyrir*, but may represent two and a half *ertugar*, or five-sixths of an *eyrir*, somewhere in the mid-20 g range.

<sup>18</sup> K. Skaare, Coins and Coinage in Viking Age Norway (Oslo, 1976), pp. 44-5, 144.

<sup>19</sup> Ibid.

<sup>&</sup>lt;sup>20</sup> Simmons Gallery, Mailbid 18, 11 July 2000, lot 481

9. Ruler: Æthelred II, king of Northumbria

Type: Styca
Moneyer: Eanred
Obverse: +EDI[]REDR
Reverse: +EANRED
Weight: 15.62

Provenance: M/D find, Colchester 1993

Location: Not recorded

The coin inset comes from the same obverse die, and possibly the same reverse die as CKN 963. The coin was prised out of the lead by the finder, and this has probably affected the total weight.<sup>21</sup> At 15.62 g, the weight would be slightly light at two *ertugar*, or two-thirds of the lighter Viking *eyrir* of *c*.24g, but this lightness may be attributable to damage. Allowing for damage, two-thirds of the heavier Viking *eyrir* of *c*.26.6 g is also possible.

10. Ruler: Probably Æthelred II, king of Northumbria (2nd reign, c.843/4–49)

Type: Styca
Moneyer: Eardwulf
Reverse: +EARDVVLF
Weight: 16.43

Provenance: M/D find, near Lowestoft, 1998

Location: British Museum



Fig. 4

Only the reverse of the coin is visible, but this can be identified as a reverse of Eardwulf, a known moneyer of Æthelred II (see Fig. 4). Elizabeth Pirie has suggested that it was probably struck from the same reverse die as CKN 1111. The surface of the coin is worn comparatively smooth, but the weight is otherwise in a good state of preservation, and probably very close to the original weight. This would be consistent with two *ertugar*, or two-thirds of an *eyrir* of somewhere between 24 and 25 g, but it could also fit with the heavier *eyrir* of 26.6 g.

11. Ruler: Irregular series, mid-9th century

Type: Styca Moneyer: –

Obverse: +VVEIREX Weight: 15.99

Provenance: M/D find, Torksey 1995 Location: Scunthorpe Museum

This weight is in good condition, and probably close to its original weight.<sup>22</sup> At 15.99 g it would fit very well as two *ertugar*, or two-thirds of the light Viking *eyrir* of c.24 g.

<sup>&</sup>lt;sup>21</sup> Coin Register, no. 168, BNJ 64 (1994).

<sup>&</sup>lt;sup>22</sup> Coin Register, no. 125, BNJ 65 (1995).

12. Ruler: --

Type: Styca Moneyer: –

Weight: 20.42 g

Provenance: M/D find, South Newbald, Yorkshire, 1979-82

Location: Not recorded

Although this piece was originally published as coming from Sancton, the Sancton material has since been revealed to have come from a productive site at South Newbald, Yorks. The coin inset is badly corroded, making identification of the ruler or moneyer impossible. The condition of the piece probably also means that it is considerably under its original weight. This may thus have represented an *eyrir* somewhere in the 24–26.6 g range, but close identification of the weight unit is impossible.

13. Ruler: -

Type: Styca Moneyer: –

Weight: 16.41 g

Provenance: M/D find, whereabouts uncertain.

Location: British Museum



Fig. 5

Most of the coin is missing, and it has left little impression in the lead, making precise identification impossible, although the remaining fragments leave no doubt that the coin was a styca (see Fig. 5). In addition to the missing coin, the lead is damaged, and the piece as a whole must be significantly below its original weight. With so much missing, it is difficult to estimate the original weight, although it probably weighed something around one *eyrir*.

14. Ruler: Æthelred II, king of Northumbria (first reign)

Type: Styca
Moneyer: Fordred
Obverse: +E-DFLRED
Reverse: +FORDRED
Weight: 17.4 gr

Provenance: Viking grave, Kiloran Bay, Colonsay<sup>24</sup>
Location: National Museums of Scotland, Edinburgh

If this and items 15 and 16 below were originally weights, only the coins have survived. Nevertheless, there are a number of reasons for supposing that they may originally have formed parts of coin-weights similar to the others described here. Firstly, stycas are rare finds in Scotland, even in Viking contexts, the main exceptions being hoards from areas of the Scottish borders

<sup>&</sup>lt;sup>23</sup> J. Booth and I. Blowers, 'Finds of sceattas and stycas from Sancton', NC 143 (1983), 39-45, no. 64, See also n, 21 above.

<sup>&</sup>lt;sup>24</sup> R.B.K. Stevenson, SCBI 6, National Museum of Antiquities of Scotland, Edinburgh, Part 1, Anglo-Saxon coins with associated foreign coins (London 1966), no. 22.

which should probably be considered as part of Northumbria during this period.<sup>25</sup> Secondly, the two coins were found in a Viking grave, together with a set of scales and several other weights of Viking manufacture.<sup>26</sup> Thirdly, both coins were pierced with a single hole through the centre. Piercing of this sort seems unlikely to have been to allow the coin to be worn as jewellery, and stycas are in any case unlikely to have been considered attractive enough to wear as jewellery. As Archibald points out, this sort of central piercing is consistent with the central pin used to fasten the coin to the lead on item 19 below.<sup>27</sup> While the fact that the lead of the other weights in the grave survived in good condition could be interpreted to suggest that the coins did not originally form parts of weights, the coins were only discovered in a later stage of the excavation, after the comparatively stable environmental conditions of the grave had thus been disturbed.<sup>28</sup> It would therefore not be surprising if the coin-weights (if such they were) had deteriorated more than the weights discovered earlier. With only the coins remaining, there is no way of estimating the size of the original weights. The fact that the other weights from the grave were found together with a pair of scales is a fairly clear indication that this was a set of weights, of which the two putative coin-weights may have been a part. However, the other weights in the set cannot all be made to correspond to a single weight standard,<sup>29</sup> and this should warn against the assumption that the coin-weights should necessarily correspond with a clear system of aurar and ertugar. The presence of the coins together with a number of other decorated weights may indicate that the function of the coins in the weights was purely decorative, as Skaare suggested for the comparable weights from Vig. However, there is no clear indication that the putative coin-weights and the other coinweights in the grave shared a common origin, even though they ended up in the same set of weights, and they may originally have had a separate function. In this respect it is important to note that the Viking settlements in Scotland apparently used coinage considerably less in the ninth and early tenth centuries than their counterparts in the Danelaw, since unlike the latter they did not inherit a monetary economy when they conquered and settled. 30

15. Ruler: Archbishop Wigmund of York (837–54)

Type: Styca Moneyer: Coenred

Obverse: +VIGIIVAD.IP.EP (N reversed)

Reverse: +COENRED Weight: 14.8 gr

Provenance: Viking grave, Kiloran Bay, Colonsay<sup>31</sup>
Location: National Museums of Scotland, Edinburgh

See item 14 above for discussion.

16. Ruler: -

Type: Styca Moneyer: – Weight: –

Provenance: Viking grave, Kiloran Bay, Colonsay

Location: Lost

Like items 14 and 15, this coin was part of the grave goods from Kiloran Bay, and it is possible that it may also have been part of a coin-weight. However, the coin itself is lost, and it is only recorded that it was illegible. It is therefore not fruitful to discuss it further.<sup>32</sup>

25 J. Graham-Campbell, The Viking Age Gold and Silver of Scotland (AD850-1100) (Edinburgh, 1995), p. 4.

<sup>26</sup> S. Grieg, 'Part II: Scotland', in Viking Antiquities in Great Britain and Ireland, edited by H. Shetelig (Oslo, 1940), pp. 48-61.

<sup>27</sup> Archibald, as in n. 4, p. 15.

<sup>28</sup> J. Graham-Campbell, pers. comm.

<sup>29</sup> S. Kruse, pers. comm.

<sup>&</sup>lt;sup>30</sup> Graham-Campbell, Viking Age Gold and Silver, passim; G. Williams, 'Land assessment and the silver economy of Norse Scotland', in Sagas, Saints and Settlement, edited by G. Williams and P.A. Bibire (London, 2001, forthcoming).

<sup>31</sup> SCBI 6, no. 43.

<sup>32</sup> Grieg, as in n. 26, p. 59; SCBI 6, p. xx.

17. Ruler: Archbishop Wigmund of York (837–54)

Type: Styca Moneyer: Coenred

Obverse: +[VIG]IIVID[A]REP (N reversed)

Reverse: +COENRED Weight: 12.1 gr

Provenance: Viking grave, Kingscross Point, Arran Location: National Museums of Scotland, Edinburgh

As with the two coins from Kiloran Bay, if this was once part of a weight, only the coin has survived.<sup>33</sup> The suggestion that this may have formed part of a weight comes again from the comparative rarity of styca finds in Scotland and the fact that, like the coin-weights from Vig and the putative coin-weights from Kiloran Bay, the coin comes from a Viking grave, although most Scottish styca finds are in non-Viking contexts in the Borders. Unlike the Kiloran Bay coins, it is not pierced, but since the majority of weights of this type were simply pressed into the lead without pins, this is not a significant omission. Once again, with only the coin surviving, there is no way of estimating the size of the weight, if weight it was.

18. Ruler: Coenwulf, king of Mercia (796–823)

Type: North 357 Moneyer: Ealhtan

Mint: -

Obverse: +COENWVLFREXM Reverse: +EALHTANMONETA

Weight: 1.37 g

Provenance: Cirencester, Gloucestershire

Location: British Museum

Like items 14-17, only the coin now survives if this was ever a weight. As with the Kiloran Bay coins, the possibility that this may have been a weight is suggested by Archibald on the grounds of its central piercing. However, in the absence of the lead it is impossible to guess the original weight, although the use of a broad penny may imply a larger weight than those with styca insets. The Gloucestershire findspot lies outside the normal distribution of such objects in areas of Viking control, but Archibald points to the fact that the Great Army was based in Cirencester over the winter of 878-9, and that the army had also passed through the area earlier that year, and suggests that the find may be linked to this period of Viking activity. A coin of Coenwulf would not normally have remained in circulation at this late date, as coins of such fine silver had generally been replaced by issues of poorer silver before the arrival of the Great Army in 865.34 This does not preclude the survival of such coins in treasuries, however, and the Great Army had already conquered three kingdoms, as well as looting numerous royal and ecclesiastical estates, before arriving in Gloucestershire in 878. Furthermore, a coin struck c.820 would fall well within the period of Viking activity prior to the arrival of the Great Army, and the coin could thus have fallen into Viking hands, and even been utilised as part of a weight, considerably earlier than the 870s. There is thus no reason to doubt that this coin could have been used in a coin-weight in a Viking context, although the evidence for this is only circumstantial, and based to a great extent on the attribution of this group of objects as a whole to the Vikings.

<sup>&</sup>lt;sup>33</sup> Grieg, as in n. 26, p. 26; SCBI 6, no. 44, I am grateful to Susan Kruse for drawing my attention to this coin in the present context.

text.

34 Archibald, as in n. 4, pp. 15–16; M.A.S. Blackburn and M.J. Bonser, 'Single finds of Anglo-Saxon and Norman coms-3', BNJ 56 (1986), 64–101, no. 85.

19. Ruler: Æthelred I, king of Wessex (865–71)
Type: Lunette, hooked lines sub-type

Moneyer:

Mint: -

Obverse: +AE-DEREDREX

Reverse: -

Weight: 99.97 g

Provenance: M/D find near Kingston, Isle of Purbeck, Dorset

Location: British Museum

This weight was found close to, but not with, item 19 below. Like item 20 below, the Dorset provenance is outside the area of lasting Viking control or settlement, but in an area which can be associated directly with Viking activity. It is probable that both weights use coins of a sub-type of the lunette type for which Hugh Pagan has proposed a date of c.873—4, which would mean that the attribution to Æthelred I is postumous. He has also suggested that this sub-type was produced in Mercia rather than Wessex.<sup>35</sup> Archibald has suggested that this Mercian origin makes sense in a Viking context, since the Viking Great Army which wintered at Repton in 873—4 was based close to Kingston at Wareham in Dorset in 875—6. While at Wareham, the Vikings made an agreement with Alfred, and Æthelweard's Chronicle specifies that the king 'paid them money' as part of the peace agreement. Archibald argues that such a payment would probably have been weighed out in a scene similar to that represented in the ninth-century Utrecht Psalter, and postulates that weights of this sort might have been used in the payment.<sup>36</sup>

The weight is well preserved, with slight damage to the base, and as a feature has a pin holding the coin coin to the lead. It is notable that the head of the pin is of considerably finer silver than the coin, raising the possibility that it may be a later addition. However, Archibald interprets the pin as an original part of the weight, in part by analogy with items 14, 15 and 18 above.<sup>37</sup> To some extent this argument is circular, since the attribution of these pieces as coin-weights is in part due to their central piercing, by analogy with the piece currently under discussion, since the majority of the coin-weights do not contain pins. However, independent evidence for the use of pins in weights of this sort has since emerged with the discovery of item 22 below. It is conceivable in the case of the Æthelred weight that the pin may have been deliberately added as a small weight adjustment, but equally it may have been ornamental. It seems unlikely, however, that a fine silver pinhead would have been added for purely functional purposes. Allowing for the pin as part of the original weight, and for the slight weight loss occasioned by the damage to the base, the original weight would have been a little over the current weight of 99.97 g. Archibald suggests that it would correspond best to a four-aurar weight, based on a weight unit of c.26 g.<sup>38</sup>

20. Ruler: Probably Alfred, king of Wessex (871–99)

Type: Lunette, hooked lines sub-type

Moneyer: Biarnulf

Mint: –
Obverse: –

Reverse: FMO/BIARNVL/ETA

Weight: 71.44 g

Provenance: M/D find near Kingston, Isle of Purbeck, Dorset

Location: British Museum

<sup>&</sup>lt;sup>35</sup> H.E. Pagan, 'Coinage in the Age of Burgred', BNJ 34 (1965), 11–27; idem, 'The coms from the mass-burial' in M. Biddle et al., 'Coins of the Anglo-Saxon period from Repton, Derbyshire', in Anglo-Saxon Monetary History, edited by M.A.S. Blackburn (Leicester, 1986), pp. 115–19; idem, 'A second parcel of pennies of the 870s from a grave at Repton', in M. Biddle et al, 'Coins of the Anglo-Saxon period from Repton, Derbyshire; II', BNJ 56 (1986), pp. 16–19; idem. 'Two new coins in the names of Aethelred I and Alfred of Wessex, Neirc 99 (1991), 6.

<sup>36</sup> Archibald, as in n. 4, p. 20

<sup>&</sup>lt;sup>37</sup> Archibald, as in n. 4, p. 13.

<sup>&</sup>lt;sup>18</sup> Archibald, as in n. 4, pp. 17-19.

This was found close to, but not with, item 19. The two weights can be seen as a pair, and much of the discussion of item 19 above also applies to this weight. The coin itself is missing from the weight, but has left a firm impression in the top of the lead. Unlike item 19, it had not been pinned into place. The coin was originally mounted with the obverse showing, and has thus left an impression of the reverse. This means that the moneyer can be identified clearly, but the ruler is less certain, since coins of this type were struck in the names of Æthelred I, Alfred and Burgred. However, Archibald has noted that the moneyer Biarnulf struck coins for Alfred in the substantive lunettes type and in another sub-type, but is not known to have struck for either Æthelred or Burgred, making it most likely that one of Alfred's coins was utilised in the weight.<sup>39</sup>

The missing coin obviously detracts from the original weight of the object, and general wear accounts for a further slight loss. Archibald estimates that, like item 19, it may originally have been based on an *eyrir* of c.26 g, although this weight would then have represented three *aurar*, rather than the four *aurar* or half-mark of item 19.<sup>40</sup>

21. Ruler: Probably Alfred, king of Wessex, 871-99

Type: Lunette
Moneyer: Dudd
Mint: Obverse: -

Reverse: +DVDD/MON/ETA (in three lines)

Weight: 10.60 g

Provenance: M/D find, said to be found near Malton, North Yorkshire.

Location: British Museum



Fig. 6

The attribution of the coin to Alfred is not completely certain, since only the reverse is visible (see Fig. 6). In Simmons and Simmons catalogue no. 154, the coin is attributed to Burgred of Mercia. However, coins of the 'lunette' type were struck for Æthelred I and Alfred of Wessex as well as for their brother-in-law Burgred, and the moneyer Dudd(a) struck for all three rulers. In this particular coin is extremely similar in style to a penny of Æthelred by the same moneyer in the Hunterian collection, raising the possibility of an Æthelred attribution. However, the coin appears to have been struck from the same reverse die as a coin of Alfred, formerly in the Lavertine collection. Interestingly, this coin appears to give Alfred the title of king of Mercia. This is probably a slip by a Mercian die-cutter producing dies for Alfred, and the close similarity with the Hunterian coin suggests a close link with Æthelred as well as Burgred. Nevertheless, the die-link does give grounds for preferring Alfred over either of the alternative candidates. The surface of the lead is distinctly uneven, making it difficult to ascertain the original dimensions and weight. If, like most of the other examples, the weight was originally a flat cylinder, it has lost a

<sup>39</sup> Archibald, as in n. 4, p. 13.

<sup>40</sup> Archibald, as in n. 4, pp. 17-19.

<sup>&</sup>lt;sup>41</sup> Pagan, Coinage in the age of Burgred, as in n. 35, passim; idem, 'Coinage in southern England, 796–874', in Anglo-Saxon Monetary History, edited by M.A.S. Blackburn (Leicester, 1986), pp. 45–66 at pp. 57–63.

<sup>&</sup>lt;sup>42</sup> A.S. Robertson, SCBI 2, Hunterian and Coats Collections, University of Glasgow, Part 1, Anglo-Saxon Coins (London, 1961), no. 557.

<sup>43</sup> I am grateful to Hugh Pagan for drawing my attention to this.

significant amount of metal. However, if the underside was more dish-shaped, as seems possible, the weight loss would be less. In the latter case, the weight may originally have represented a half *eyrir* of around 12–13 g. In the former case, it may have represented two *ertugar*, at around 16–17.5 g, but both figures are highly conjectural.

Ruler: Uncertain, 10th century
 Type: Circumscription Cross

Moneyer: –
Mint: –
Obverse: –
Reverse: –
Weight: 48.8 g

Provenance: M/D find, East Yorkshire, 1999

Location: In the process of purchase by the British Museum





Fig. 7

This piece is apparently unique in having two coin halves rather than a single coin set into the top (see Fig. 7). What makes this particularly interesting is that the two halves do not appear to match. The shapes of the edges do not match up, nor does what is visible of the inscription, even allowing for a slight overlap of the two halves. This suggests that it was thought important to have the appearance of a whole coin mounted on the coin, but that whoever produced the weight only had cut halves available at the time. The weight is also remarkable in having two iron pins or rivets holding each of the coin halves into place, in contrast to the fastening with a single pin discussed on various others weights or putative weights of this type. Both halves are of a circumscription cross type common to several rulers in the tenth century. However, there are various other types which share the same design on one side, but with a different design on the other. One half clearly comes from a reverse. The lower of the two halves at the point where they overlap begins halfway through an S, with the next letter obscured by a rivet, followed by an O or a D, followed by an A or an H (which might also represent M or N). The other half has an initial cross followed by a clear E, followed by something which might be an A or an R, which is partially obscured by the rivet which follows it. This might also represent a reverse, in which case, like the other half, it could belong to almost any ruler of the tenth century. If it is an obverse, however, the choice of possible rulers is narrowed down to Eadweard the Elder, Eadmund, Eadred, Eadwig, Eadgar or Eric Bloodaxe. Stylistically the coin appears to be comparatively early, and an attribution to Eadweard the Elder would be consistent with the broad shift towards a monetary economy in the Danelaw in the latter part of Eadweard's reign. The weight would otherwise be considerably later than the others in the group. However, the condition of the object does not encourage a firm attribution. Furthermore, the uneven shape of the object and the use of two halves rather than a single coin in any case sets this weight apart from the rest, so a later date seems not implausible.

## Origin

The distribution of these weights as a whole place them firmly in a Viking context. All but one of the weights in this group have at least approximate provenances, and the majority of these come the Danelaw, with further examples from Norway and the Western Isles of Scotland, which were also settled by the Vikings in the ninth century. The three exceptions, two from Kingston in Dorset, and one from Cirencester, are plausibly linked with Viking activity in the 870s. The five weights (or postulated weights) with recorded find contexts derive from Viking graves. There thus seems little reason to doubt the Viking origin of the weights. However, the fact that these weights exclusively use coins minted in England, and that the vast majority have been discovered in the British Isles, suggests quite strongly that they were manufactured in the British Isles and probably in the Danelaw. The majority of the weights utilise coins of the mid-ninth century, although two utilise earlier coins, and a single coin of the tenth century is also known. It is unclear whether the two earlier coins represent earlier weights, or whether they reflect the re-use in the mid-ninth century of coins which were no longer current. The single tenth-century weight appears on present to be a late survival of a weight type which apparently predominantly dates from the third quarter of the ninth century. This was the main period of Viking conquest and settlement in England, but predates the establishment of the Anglo-Viking coinages in East Anglia, Northumbria, and Mercia. The weights thus belong to a period in which the Viking economy was still bullion-based rather than properly monetary, but during which the Vikings in England were becoming increasingly familiar with Anglo-Saxon coinage.

# Weight units

If one accepts that the weights are of Viking origin, it makes sense to compare them with what is known of Viking weight units. Two pertinent units appear in medieval Scandinavian sources, and it is likely that these already existed in some form by the Viking Age. These are the *eyrir* (pl. *aurar*), or ounce, and the *ertog* (pl. *ertugar*), or third of an ounce. However, a number of studies based on archaeological evidence have identified units apparently equivalent to half an *ertog*, or one-sixth of an ounce. As Kruse points out, a weight unit of a sixth of an ounce allows for the convenient division of the ounce both into halves and into thirds. A division into sixths is also consistent with the Viking tendency towards a duodecimal system.

A number of studies have been undertaken on the basis of archaeological evidence, which appear to correlate to some extent with the *ertog* and *eyrir* of the historical record. A.W. Brøgger's classic study, based on Norwegian finds, identified two separate *eyrir* standards, one at 26.5g, and one at 24g. According to Brøgger, the heavier standard was used in the early Viking Age. with a later shift to the lighter standard, possibly as a result of Anglo-Saxon influence. Another early study by T.J. Arne, based on Swedish finds, identified a weight unit of c.4 g, and possibly another of c.4.25 g. These, in comparison with Brøgger's figures for the *eyrir* may plausibly be identified with the half-*ertog*. Both versions of this unit find some corroboration in more recent studies. Kyhlberg identifies units of c.4 g and 4.266 g on the basis of weights from Birka, while Heiko Steuer suggests units of c.4 g and 4.26 g on the basis of weights from Hedeby. The postulated c.4.25, 4.26, and 4.266 g units may clearly regarded as a single unit, since even the most optimistic studies of Viking metrology would argue for rigid control within one-hundredth of a gramme. Both the 4.0 g and the c.4.25 g unit would be compatible with two suggested figures for the *ertog*; that of Nielsen (based on weights) at  $8.1 \pm 0.4$  g, and that of Lundström (based on ingots) at 7.78-8.64 g.

45 Kruse, as in n. 4, p. 88.

46 Brøgger, as in n. 44, pp. 77-85, 102-3

<sup>47</sup> T.J. Arne, 'Ein persisches Gewichtssystem in Schweden', Orientalisches Archive 2 (191-12), 122-7.

<sup>&</sup>lt;sup>11</sup> A.W. Brøgger, Ertog og Øre: Den Gamle Norske Vekt (Kristiania, 1921). Detailed references to a number of more recent surveys are provided in S. Kruse, 'Ingots and weight units in Viking Age silver hoards', World Archaeology 20:2 (1988), 285–98.

<sup>&</sup>lt;sup>48</sup> O. Kyhlberg. *Vikt och Värda*, Stockholm Studies in Archaeology 1 (Stockholm, 1980), pp. 259 ff.; H. Steuer. 'Gewichte aus Haithabu', *Berichte über die Ausgrabungen in Haithabu* 6 (1973), 9–22.

<sup>&</sup>lt;sup>49</sup> H.-O Nielsen, 'Röntgenologische und metrische Untersuchungen an zwei Kugel-Gewichtssätzen aus Haithabu', Berichte über die Ausgrabungen in Haithabu 18 (1983), 109–20.

Nielsen also proposed an eyrir of  $24.4 \pm 0.8$  g, which falls close to Brøgger's 24 g unit. This also agees with Richard Warner's analysis of Scottish-Viking 'ring-money', which produced a weight-unit of 24.0  $\pm$  0.8 g.<sup>50</sup> The eyrir of c. 26.5 g also finds more recent support. Patrick Wallace suggested a unit of 26.6 g, based on weights from Dublin, and two lead weights of 26.65 g each have recently been recovered from a Viking boat burial at Scar on Sanday, Orkney. 51 Early silver arm rings from Ireland are identified by John Sheehan as relating to a standard of 25.9 ± 0.4 g to  $27.3 \pm 0.9 \text{ g}$ , while Warner relates these to a target of 26.15 g.<sup>52</sup> It is notable, however, that the half-ertog of 4.25 g would give an eyrir of 25.5 g rather than 26.5 g. Kruse, on the basis of silver ingots found in England and Wales, argues for a somewhat looser figure of c.25-26 g.53 Kruse has also expressed doubts as to the precision of some of the figures cited above. All of these are based on very limited samples of material, which would raise questions of statistical validity under the best of circumstances. When one adds the instability of lead, and the fact that in a number of cases weights are only estimates based on the reconstruction of damaged or fragmentary material, it seems unlikely that the narrower figures can be considered reliable.<sup>54</sup> Certainly with many of these estimated standards there are objects which miss the estimated target by significant amounts, although in some cases the discrepancy may be explained by regarding the weights as multiples of smaller units such as the ertog or the half-ertog, rather than representing complete aurar. However, discrepancies in weight between ingots from a single mould indicate a lack of complete metrological stability, and suggest that a certain amount of imprecision was tolerated in the casting process,55 and a similar tolerance may explain the weight variations in other types of artefacts such as the silver 'ring-money'.

A slight degree of imprecision must also have been tolerated during transactins involving weighing out silver, whether in the form of coins or bullion. Experiments with an early Anglo-Saxon balance show that it was disturbed by a weight of 0.06 g, tilts through 2 degrees on 0.09 g, 5 degrees on 0.17 g, and 10 degrees on 0.23 g; consistent with tests on Migration-Age balances from Norway, and Viking-Age balances from Sweden. According to Christopher Scull, 'This suggests that although accuracy to .06 g could be achieved with care, discrepancies of up to 0.20 g may have been tolerable.'56

Å number of possibilities thus arise from the archaeological evidence: a single *eyrir* standard somewhere in the 24–26.6 g range, but only very approximately applied; two main standards of c.24 g and c.26.6 g, both subject to considerable variation in different times and places; no single standard across the Viking world, but a variety of local standards, possibly quite tightly controlled within a particular sphere of commercial activity, but with potential for some variation in weight over extended periods.

Of the eighteen weights in the group, six appear to relatively close to their original weight. A further six are damaged, but in such a way that it is possible to estimate broadly what the original weight may have been, while another one is in such poor condition that it seems impossible to guess the original dimensions or weight. The remaining five, if weights at all, survive only as coins, with no clues to the extent of the original weight.

All the pieces which appear to be close to their original weights tie in relatively well to a broad weight standard of an *eyrir* of 24–26.6 g. The two weights found near Kingston (items 19 and 20) apparently correspond to a four-unit and a three-unit respectively, with a fairly high *eyrir* of c.26 g. Four more pieces cluster round the two-*ertugar* range of 16–17.5 range. Item 5 is at the

<sup>&</sup>lt;sup>50</sup> R. Warner, 'Scottish silver arm-rings: an analysis of weights', Proceedings of the Society of Antiquaries of Scotland 107 (1975–6), 136–43.

<sup>81</sup> P.F. Wallace, 'The economy and commerce of Viking Age Dublin', in Untersuchen zu Hundel mit Verkehr der vor- und frühgeschichtlicheb Zeit in Mittel- und Nordeurope. Teil IV. Der Handel der Karolinger- und Wikingerzeit, edited by K. Düwel et al. (Göttingen, 1987), pp. 200–45; Kruse. Ingots and weight units, p. 287; O. Owen and M. Dalland. Scar: A Viking hoat hurial on Sanday. Orkney (East Linton, 1999), pp. 118–26.

<sup>52</sup> Cited in Kruse, as in n. 44, p. 288.

<sup>83</sup> Kruse, as in n. 44, p. 294.

<sup>54 1</sup> am grateful to Susan Kruse for our recent discussion of this point.

<sup>55</sup> Kruse, as in n. 44, pp. 294-7.

<sup>&</sup>lt;sup>56</sup> C. Scull, 'Scales and Weights in Early Anglo-Saxon England', Archaeological Journal 147 (1990), 183-215, at p. 188.

upper end of tis range, with an implied *eyrir* standard of *c*.26.6 g. Items 9 and 11 are at the opposite extreme, slightly below an implied *eyrir* standard of 24 g. The remaining one (item 10) lies in between at 16.43, with an implied *eyrir* standard of just under 25 g. This range supports the interpretation of a single broad standard, since all the weights are assumed to be of similar date, and to have been produced in more or less the same area. The remaining weights for which it is possible to estimate weights probably also correspond with the same standard, with three estimated at an *eyrir* somewhere in the mid-20s, a fourth at half an *eyrir*, and a fifth either at half an *eyrir* or two *ertugar*, but their original weights cannot be estimated with sufficient precision to provide any useful information about precise weight standards. If the two weights at half an *eyrir* are estimated correctly, this lends support to Kruse's view of the importance of the half-*ertog* unit permitting the convenient division of the *eyrir* into either halves or thirds.

#### Function

The use of coin-weights of this type can be explained in three different ways, corresponding to different interpretations of the sophistication of the monetary system in Viking England. Firstly, the coins can be regarded as purely decorative, and merely a sub-group of the broader class of Viking weights of this period which use items of insular metalwork to decorate otherwise unattractive lead weights, and possibly also to customise them so that their owners could readily recognise their own weights, and distinguish individual weights within a set. Under this interpretation, there would be no significance in the use of coins as such, and the weights would have functioned purely in the measurement of silver bullion, with no reference to the coin-types represented on the weights. As mentioned above, Skaare suggested that items 6 and 7 were purely decorative, on the somewhat curious grounds that one weight shows the coin obverse, while the other shows the reverse. With this in mind, one may also not that the more recent finds of styca-weights also show no consistency in whether the obverse or reverse is shown. A purely decorative function is also consistent with the use of the fine silver pinhead on item 19, and the re-use of older coins which were no longer current, as well as of stycas, which the Vikings do not seem to have valued highly as coins, preferring the broader silver pennies even in Northumbria.

This explanation is not wholly satisfactory. In the first place, the majority of Vikings were presumably illiterate, and would thus have been unable to distinguish the obverse from the reverse of stycas, and it is thus inappropriate to build too much into the orientation of these particular weights. In the case of the weights utilising broad pennies, obverse and reverse would have been more readily distinguishable, and two of the three must have shown the obverse, while the Coenwulf coin was pierced from obverse to reverse, implying that it was also mounted with reverse showing. However, the significance of obverse and reverse on any of these coins is probably rather more apparent to modern numismatists than to illiterate Vikings, unused to a monetary economy. The orientation of the coins thus gives no real indication as to the significance of the use of coins on the weights. A further argument against the decorative function of the coins is that stycas are not enormously attractive decorative objects, although they would presumably have been more attractive then than now, when the metal of the coins was still comparatively bright and uncorroded. The attractiveness of the decoration would also probably be less important if, as suggested above, part of the function of the decoration was ease of identification rather than aesthetic appeal alone.

A final argument against the purely decorative interpretation of the group as a whole is the appearance of item 22. The weight itself is crudely shaped, and the two coin halves on the top have not even been carefully aligned, while the four iron pins can never have been visually attractive. In particular, the use of the two coin halves indicates very strongly an expectation that a whole coin should be included in the weight. Since other types of metalwork inset into weights are not always evenly shaped, and some weights are even shaped to match the inset, there seems no reason to have produced a weight with two coin halves rather than one, unless the whole coin was deemed to have some significance, However, since this weight is anomolous both in its late date and its clumsy execution, it is dangerous to generalise too far on the basis of this particular object.

The possibility that, within the group as a whole, the function of the coins was either purely decorative or a combination of decoration and ease of identification cannot therefore be excluded.

At the opposite extreme, the selection of specific types of coins could be regarded as significant. That the Vikings were interested in the quality as well as the quantity of metal received in payment is generally recognised, and is clearly demonstrated by the process of pecking which appears on a large number of coins and other objects from Viking contexts. The metal content of Anglo-Saxon coins in the ninth century varied considerably, and one could argue that the weights were specifically customised for use in measuring out set weights of specific coin types, taking account of the relative purity of the different types, to achieve a specific value in pure silver.

This seems a little far-fetched, for two reasons. Firstly, as discussed above, the metrology of Viking weight units seems to have been relatively imprecise. The acceptance of such imprecision in the measurement of quantity, despite the sensitivity of the balances of the period, makes it unlikely that the weights were intend to fit into a system which measured quality quite so rigidly. A more flexible system, allowing the Vikings to weigh whatever precious metal came their way, seems more plausible. Furthermore, if the coin-weights were used to weigh specific coin types, it is remarkable that so many of the weights utilise Northumbrian stycas, although these rarely occur in Viking contexts, and seem to have been little used by the Vikings as coinage *per se*. One could even argue that stycas were used so readily on the weights precisely because they were not considered valuable as coins, and thus would not themselves be useful as a means of payment. It is also unlikely that sufficient numbers of 'porcupine' pennies and pennies of Coenwulf came into Viking hands to justify the creation of type-specific weights for these coin-types.

A third interpretation, and the one favoured by the author, lies between the two extremes. This interpretation views the coin weights as more than purely decorative, but does not require any sophistication in the silver economy of early Viking England. It is clear from the speed with which the Viking settlers in England adopted coinage that they quickly recognised the symbolic importance of striking coins. Purely as a means of exchange, coinage offered no great advantage over hack-silver, especially since both coins and other silver items used in payment often seem to have required validation by pecking or other methods to establish the quality of the silver. The adoption of coinage was thus as much the adoption of a cultural ideal and symbol of authority as an economic development.<sup>57</sup>

As discussed above, the evidence of the coins used suggests that this type of weight was current in the earliest years of Viking settlement, before they had begun to issue coins of their own, but after they had already become familiar with Anglo-Saxon coinage. As item 22 shows, such weights remained current into the tenth century, even though a number of Viking rulers in England had begun to issue coins by this time. However, it is clear from the hoard evidence that even after the introduction of Anglo-Viking coinage, coins and hack-silver continued to circulate side by side, and bullion remained a central part of the Viking silver economy.

It is proposed that the coin-weights functioned as bullion weights, with no direct relationship to any type of coinage. Where it is possible to check, the weights appear to correspond with established Viking weight units, although with a degree of variation which supports Kruse's contention that these weight-units were seldom very precise. However, the use of coins in the weights may have been a deliberate attempt to place a symbol of authority on the weights, implying a degree of control, but with little concern for the identity of the original authority behind the issue of the coin. This would be consistent with the wide variety of coins used in the weights, and even with the use of the two coin halves on item 22. It would also be consistent with the apparent disregard for the relative importance of obverse and reverse in the mounting of the coins.

It is even possible that the design of the weights was influenced by the Anglo-Saxon weight type discussed in the first part of this paper. Substantial payments in coin to the Vikings would certainly have been weighed out, and the Vikings may well have come into contact with Anglo-Saxon weights struck from coinage dies in this context. Such contact would have helped to established the concept of the coin design on the weight as a symbol of authority. The fact that the

<sup>57</sup> G. Williams, 'Monetary borders and the ideology of kingship in the early Middle Ages', NC 161 (2001, forthcoming).

Viking weights incorporate whole coins, rather than being struck from coinage dies, probably reflects the fact that these weights were apparently introduced before the Vikings in England had coins, and therefore, dies of their own. Once the new type was established, this established a pattern which continued even after coinage dies became available, as shown by item 22.

## Summary and conclusions

On the evidence of form and distribution, lead weights incorporating Anglo-Saxon coins as part of the design can be divided into two groups. The first, struck using coinage dies, is here identified as typically Anglo-Saxon, and directly connected with the issue of coins from various mints. On the basis of current evidence, this type of weight is known from the late ninth century to the mideleventh century, shortly before the end of Anglo-Saxon rule. The second group, with Anglo-Saxon coins inset in the top, is seen as typically Viking, probably of Danelaw origin, with a function of weighing out silver bullion, possibly including coinage *inter alia*. This group predominantly dates from the late ninth century, with a single later example probably from the tenth century. The weights of the Viking group probably did not have the same 'official' status as the Anglo-Saxon weights, but the idea of using a coin image as a symbol of authority or of recognised weight standards may have been derived from Anglo-Saxon weights, and reflects growing familiarity with Anglo-Saxon coinage in the early period of Viking settlement in England.

# MERCURY PLATING ON SOME EARLY ENGLISH COINS

#### E.J. HARRIS AND D.R. GRIFFITHS

#### Introduction

SELLWOOD<sup>1</sup> has described the likely method of production of early English silver coins, which seems to have been based on the use of a piece, roughly square, of a thin flan of silver alloy on which the obverse and reverse types were stamped, followed by use of a circular cutter (like a pastry cutter) to separate the final round coin from the flan. He showed that a series of specimens could be made from a hammered sheet of alloy within the weight limits observed for good specimens of Anglo-Saxon coins. The metal used for the coins was supposed to be good silver, which after the coinage Reform by Eadgar on AD 973 was as high as ninety-five per cent pure. Many coins struck before Eadgar's Reform did not reach this standard and values lower than thirty per cent have been reported. To maintain a high standard it would have been necessary for the mint to be equipped to carry out assays by cupellation and the continuing control of purity would have been required. Re-striking was called for when new types were made current and on accession of a new King. The previous coins had to be exchanged and a fee paid at a mint. Mints existed in at least thirty different towns in the reign of Eadgar. This procedure yielded a wealth tax collected by the moneyer, who paid a fee for his appointment to the King.

Interest in the composition of the coins of this period led to a series of chemical analyses<sup>2</sup> followed by hundreds of results obtained by non-destructive methods.<sup>3</sup> The pre-Reform coins are usually brittle and subject to cracking; their fragility has been illustrated by assessing the proportion of damaged specimens in museum collections; this was between twenty and fifty per cent of the coins issued between those of Ecbeorht (AD 802) and the pre-Reform types of Eadgar, excepting only the 2-line and Orsnaforda types of Alfred.<sup>4</sup> The embrittlement was suggested to arise from corrosion, especially of the elements copper, lead and zinc which were found in the alloy.

Among the specimens analysed, Metcalf and Merrick<sup>5</sup> described with a diagram the heterogeneous composition of a coin of Pepin (King of the Franks, AD 751–768), having an internal boundary between silver and copper apparently containing mercury. This coin was described as a forgery; in a recent re-analysis mercury was not found but the interior was shown to be composite.<sup>6</sup> A photomicrograph of a cross section of a fragmentary coin of Eadgar submitted by one of the authors to the British Museum and by them to the Royal Mint disclosed that it appeared to be

<sup>&</sup>lt;sup>1</sup> D.G. Sellwood, 'Medieval Minting Techniques', BNJ 3 (1963), 57-65.

<sup>&</sup>lt;sup>2</sup> J.S. Forbes and D.B. Dalladay, 'The Composition of English Silver Coins', BNJ 30 (1960), 82–7 and E.J. Harris, 'Debasement of the Coinage' in SCMB No. 524 (Jan 1962), 5–7.

<sup>&</sup>lt;sup>3</sup> G.R. Gilmore and D.M. Metcalf, 'The Alloy of the Northumbrian coinage in the Mid-ninth Century' in *Metallurgy in Numismatics*, Vol. I, *RNS Special Publication No. 13*, edited by D.M. Metcalf and W.A. Oddy (London, 1980), pp. 83–97. D.M. Metcalf and J.M. Merrick, 'Studies in the Composition of Early Medieval Coins', *NC* 127 (1967), 167–81. H. McKerrell and R.B. Stevenson, 'Sonic Analyses of Anglo-Saxon and Associated Oriental Coinage' in *Methods of Chemical and Metallurgical Investigation of Ancient Coins*, Vol. I, RNS Special Publication No. 8, edited by E.T. Hall and D.M. Metcalf, (London, 1972), pp. 195–209. D.M. Metcalf and J.P. Northover, 'Debasement of the Coinage in Southern England in the Age of Kinig Alfred', *NC* 145 (1985), 150–76. D.M. Metcalf and J.P. Northover, 'Interpreting the Alloy of the Later Anglo-Saxon Coinage', *BNJ* 56 (1986), 35–63. D.M. Metcalf and J.P. Northover. 'Carolingian and Viking Coins from the Cuerdale Hoard: an Interpretation and Comparison of their Metal Contents', *NC* 147 (1988), 170–7. D.M. Metcalf and J.P. Northover, 'Coinage Alloys from the Time of Offa and Charlemagne to c. AD 864', *NC* 149 (1989), 101–20.

<sup>&</sup>lt;sup>4</sup> E.J. Harris, 'Broken Coins as a Guide to Mint Practice', SCMB (1980), 179-81.

<sup>5</sup> Metcalf and Merrick, as in 3.

K. Anheuser, 'Silver plating on a Carolingian Denier of Pepin III reconsidered', NC (1996), 156, 237–39.

made of 'two types of material arranged in sandwich fashion, the outer layers being readily distinguished from the central core by their darker spotted appearance'. It was described as a forgery. However the published analyses show the proportion of copper in specimens of this date can reach 30% so a progressive oxidation proceeding inwards would give rise to this appearance. It is a matter of argument whether a sub-standard coin struck by a dishonest or uncontrolled moneyer using official dies is a forgery. The present analyses were made as an exercise to examine the use of alloys and the possible non-uniform composition as achieved, for example, by plating. The material available to us was inevitably in a fragmentary condition so of little commercial value. McKerrell and Stevenson<sup>8</sup> remarked that analysis of broken coins was likely to bias the conclusions drawn from the results; this is an important point because fragility after a long period of exposure and consequent corrosion would depend upon the alloying elements.

We did not set out to add to the existing body of overall analyses but rather to examine the variation of composition across the thickness of the specimen, which would be dependent upon the conditions to which the coins had been exposed. This led to our finding evidence for use of mercury as a means of plating the surfaces of four specimens. Of these, three were certainly issued for Eadgar before his Reform and the fourth was of the same period (AD 900–973). Use of mercury to improve the appearance of artefacts and forgeries or coins has been described. Of course, with specimens of unknown provenance one does not know when the mercury was applied and can best address this question by examining better sourced examples such as those obtained from finds directly put into the care of a museum. Certainly in the past collectors have used various means to embellish their specimens, so our results, being drawn from material discarded from collections, cannot say when the mercury was applied. A specimen of an Æthelberht (AD 858–866) coin had tin besides a problematic trace of mercury in a superficial layer.

Many of our analyses did not total to one hundred per cent; either open space or oxygen combined as oxide, together with the sum of the elements including gold and arsenic present in small amounts, accounts for the deficiency. When interpreting results, the presence or absence of voids or oxide and sulphide gives information about the degree of corrosion. There are several reasons for mercury not having been noticed before in these coins. They are: (1) it is associated with poor specimens having a low total metal content which were discarded, (2) the conventional analyses have been made on a polished edge over which only a few microns at the boundary may carry the mercury, (3) if the specimen has ever been heated, the mercury would have been distilled off; even exposure to the electron beam visibly removes mercurial spots, (4) the outer layers may have flaked off, as can be seen to be in progress on some samples.

#### Methods

The fragment of coin was embedded in resin with a broken edge exposed. After the first results showed that contraction of the resin when setting could detach a thin layer from the surface, the specimen was held in a sheet of cellulose acetate to protect it from the resin. The embedded coins were polished with graded abrasives. The analyses were made alternatively by energy dispersive scanning electron microscope (either Hitachi S-570 plus Link analytical system AN 10,000 or JEOL JSM35CF with Oxford Instruments Isis system) or by a wavelength dispersive electron probe microanalyser operated at 25 kV (JEOL type JXA 8600).

<sup>&</sup>lt;sup>7</sup> G.P. Warden, 'A Contemporary Forgery of Eadgar', BNJ 31 (1962), 159.

<sup>8</sup> McKerrell & Stevenson, as in 3.

<sup>&</sup>lt;sup>9</sup> W.A. Oddy, 'Gilding and Tinning in Anglo-Saxon England' in Aspects of Early Metallurgy, British Museum Occasional Paper No. 17 (1977), pp. 129–34.

#### Results

The results have to be considered for each specimen individually, along with the relevant photographs and graphs. The first two specimens did not show any mercury content. They do, however, illustrate the differences in appearance and composition between a post-Reform coin struck when a high standard was maintained under Æthelred II and a pre-Reform coin of Eadgar.

The first (Fig. 1) has a uniform appearance across its thickness, consistent with the similar analyses made at spots near B, C or D (No. 1 in the Table) and a scanned area at the centre of the section. When the spot was focussed at the edges there was less total metal but the copper/silver and lead/silver ratios were lessened, indicative of the selective removal of the alloying metal by blanching or corrosion. This specimen carried 0.6–1% As and 0.8–1.6% Au.

The Eadgar specimen (Fig. 2 and No. 2 in the Table) was struck by Frard, a moneyer known from another coin (also imperfect) to have worked at the York mint (Norweb Sale Lot 1194). The metal of our coin has an internal structure with a lighter central strip between darker outer bands similar to the Warden specimen. Oxidation of the copper, whether induced by roasting or by long exposure to ground water, would add an undetected element to the total.

The Eadgar specimen (Fig. 3 and No. 3 in the Table) was struck by the moneyer Dudeman. There was no mint name on our specimen, but this moneyer worked at a mint noted on a coin of Eadwig as HAM, perhaps Northampton. The coin carries traces of mercury at its edges, which is best shown by the line scans. These were obtained from the Oxford Instruments – JEOL apparatus. They provide only rough estimates of composition obtained in exposures of 2 sec per point and without background correction in a line covered by the electron beam spot as it progresses across the specimen, and do not total one hundred per cent because of voids, oxide and traces of other elements. They are supplemented in the Table by analyses made at spots and areas not necessarily near the scan line. The analyses show mercury (Hg) at up to six per cent at certain places on one or other edge or on both depending on the location. In the scan for Hg the background signal from the other metals can be seen between the narrow Hg peaks at the edges. The mercury would not be significant in an overall analysis. The average Ag/alloy ratio holding in strips 25 × 300 µm adjacent to the two sides is higher than the ratio in the central area, which could be the consequence of leaching out of the copper after it has oxidised. The mercury may well have been applied relatively recently.

The Eadgar coin (Fig. 4 and No. 4 in the Table) was struck probably by Deorulf and certainly at Tamworth since the central portion carried the inscription 'T + E'. It is likely to be the remains of

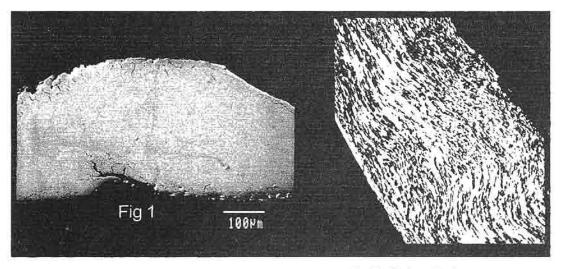


Fig. 1. Æthelred

Fig. 2. Eadgar Frard

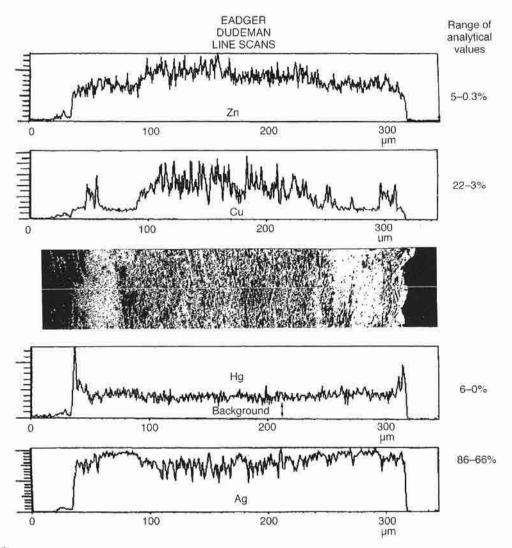


Fig. 3.

the specimen illustrated in *SCBI* 20 no. 811. Another coin of this moneyer struck at Tamworth (Norweb Sale Lot 1197) is also imperfect. Our example has mercury at its edges where it replaces copper, but there are additionally peaks of mercury concentration at 170 and 270 µm. This penetration could have arisen by applied mercury running into cracks.

The Eadgar coin (Fig. 5 and No. 5 in the Table) was struck by the moneyer Thurmod. Other coins struck by this moneyer have the signature of the Chester mint. The present specimen was similar to no. 433 in the Chester hoard described in *BNJ* 27 (1955), 125. Again there is mercury at the edges, but there is more present at one edge (the left in Fig. 5) than at the other. Additionally in the traverse there was a peak of mercury about 2/3 across. Again this might be consequent upon penetration of a crack.

The results displayed in Figs 6A and 6B and set out at No. 6 in the Table were obtained from a coin struck for Æthelberht who was sub-king of Kent, Essex and Sussex from 858 to 860 AD, and king of all southern England from 860 to 865/6 AD. Some similar coins struck for his predecessor Æthelwulf bear a monogram of Canterbury. Published analyses of issues of this period 10 include

<sup>10</sup> Metcalf and Northover (1985), as in 3.

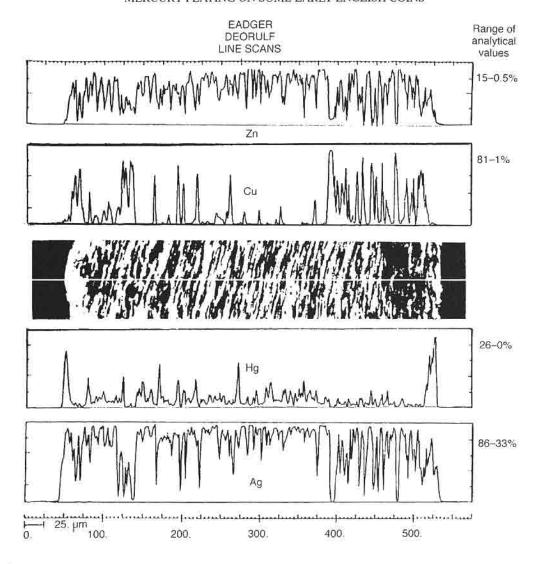


Fig. 4.

some coins having less than thirty per cent silver. The section has in some places at each side an ill-defined area with a black background. Between these areas the background is grey. At other places the black/white material is thin or absent. Possibly the picture is of a coin which had been thinly plated with a tin-silver alloy, and subsequently corrosion had led to loss of most of the plating. The hue scans (Fig. 6A) indicate that the dark surface area(s) carry silver and tin with low copper whereas the interior has a high copper with low silver and tin. in this specimen there was no clear banding into discrete areas and there were isolated patches of the dark material interspersed in the adjacent light material. A more accurate and detailed set of analyses along a line of width defined by the spot (c.1.5 µm) running from the right hand edge through the black/white area into the grey/white area was made in 3 µm steps (Fig. 6B). Some of these fuller analyses are in the Table with values found for the three major components, Sn, Ag and Cu. Referring to the Table it is noteworthy that indicative evidence for the presence of mercury at 3–4% near one edge was obtained in two independent analyses. There is also evidence for the presence of Zn in much of the interior.

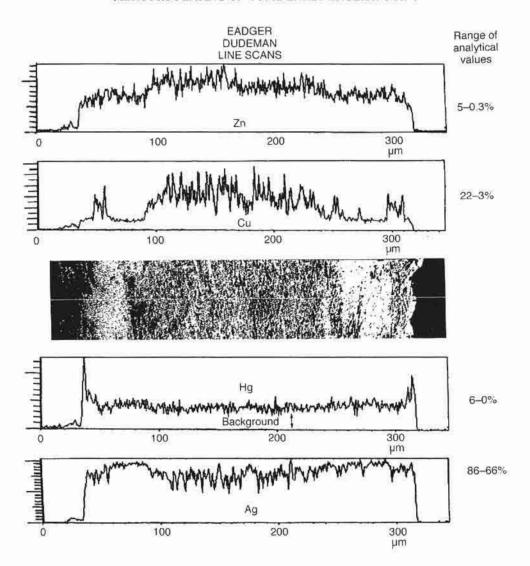
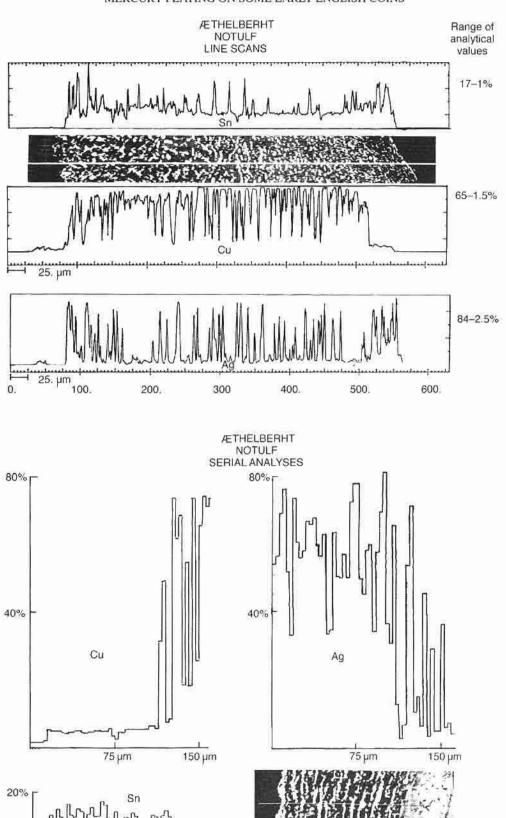


Fig. 5.

Finally (Fig. 7 and No. 7 in the Table) are results obtained for a fragment having no other clue to its issuer or date than that it was the centre of a piece having a + at the centre of each side. This indicates that it derived from a type issued for successive kings between Eadward the Elder (899–924 AD) and Eadgar's last pre-Reform type issued up to AD 973. We include it because it contained so much mercury. The line scans show that in the section examined, amounting to about 40% of the thickness, there were spots with up to 40% mercury alloyed with silver and copper. The remaining thickness was mainly silver but again there was high mercury at the edge. It can be no surprise that most of the specimen was fragmentary when it came into our hands. Whether some relatively recent exposure to chemical treatment had led to the observed structure is an open question. By heating some fragments in a small test tube, a grey deposit of mercury was obtained on the cool part of the tube. Regrettably this was not accompanied by measurement of the loss of weight.



150 µm

Fig. 6.

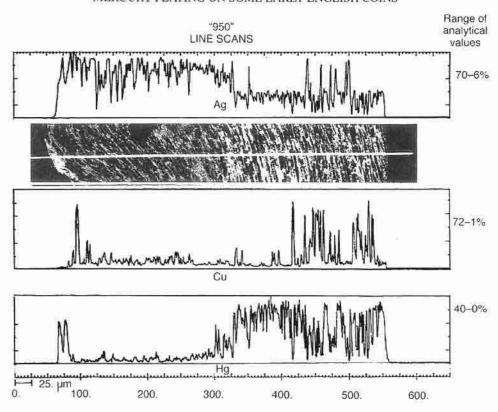


Fig. 7.

**Table:** An 'area' is scanned by the spot to provide local average values, a 'spot' is provided by the focussed beam directed at a particular feature. Results from the wavelength dispersive probe apparatus are marked by a  $\ast$ , nm = not measured, ns = not significant. Numbers shown in brackets are values less than twice the estimated uncertainty but indicate that the element is present. Sulphur is recorded as a sign of surface corrosion. Chloride was usually present, if at all, at less than 0.2%, exceptionally one 3 $\mu$ m sample of the sequential analyses had 5% chloride.

Coin and	Total of elements	Contents % by weight (or if preceded by N normalised to 100%)						
where analysed	measured	Ag	Cu	Zn	Hg	Pb	Sn	S
1. Æthelred II Chester mint, la	ast small cross type, n	oneyer A	lesige. Fig.	L				
At edge, near A	91.4	88.3	1.6	0	()	0.9	0	0.4
At A	*89.7	85.7	2.4	0	0	1.3	0	ns
At B	*96.8	92.5	2.5	0	0	1.5	0	
At C	*98.0	93.6	2.7	0	0	1.4	0	ns ns
At D	*97.4	94.7	1.8	ns	0	0.5	0	ns
At edge, near D.	89.7	87.9	0.3	ns	0	0	nm	1.5
2. Eadgar, 2-line type, money	er Frard. Fig 2.							
At edge A	98.5	86.5	2.9	3.3	0	3.1	0.5	0.6
Internal area 100 × 110 µm	100	80.8	9.6	3.4	0	2.7	nm	0.2
Area at centre 50 × 60 µm	*87.0	72.8	9.6	3.0	0	0.8	(0.3)	(0.6)
At edge B	*99.5	90.1	3.0	3.6	O	1.3	ns	(0.2)

Coin and	Total of elements	Contents % by weight (or if preceded by N normalised to 100%)						
where analysed	measured	Ag	Cu	Zn	Hg	Pb	Sn	S
3. Eadgar, 2-line type moneyer l	Dudeman. Fig. 3 wit	th line sc	ans.					
Spot at edge A	*87.5	72.6	4.7	1.4	6.1	(0.6)	ns	1.4
Spot 10 µm in	*91.4	83.4	3.0	2.6	ns	(1.1)	ns	ns
Strip $25 \times 300 \mu\text{m}$ along side A	94.27	8.7	11.9	3.7	0	nm	nm	nm
Middle area 50 × 55 µm	94.3	66.2	22.3	4.4	ns	(0.9)	ns	ns
Strip 25 × 300 µm along side B	97.0	84.3	9.7	2.3	0.6	nm	nm	nm
Spot at edge B	93.5	85.9	2.5	(0.3)	4.7	nm	nm	nm
4. Eadgar, moneyer probably De	orulf, 3-line type, n	nint Tamy	worth. Fig. 4	and line	scans.			
Spot at edge A	84.2	52.0	1.1	(0.2)	28.3	(0.2)	ns	2.0
Spot (dark) at 35 µm	*94.4	33.7	54.6	4.8	ns	(0.7)	ns	ns
Intl area 100 × 110 µm	94.4	31.0	44.3	14.4	ns	2.4	ns	ns
Spot at 100 µm in	*98.0	85.8	4.9	6.0	ns	(1.1)	ns	ns
Spot at edge B	85.8	50.3	3.0	0.4	26.3	1.4	ns	ns
5. Eadgar, moneyer Thurmod a 2	2-line type, moneyer	known :	at Chester fo	or other tvi	pes, Fig. 5	and line	scans.	
At edge A	87.1	67.8	1.2	0	15.1	2.2	nm	0.5
Spot 5 µm inside	100	86.8	3.9	0.4	3.4	4.5	ns	nm
Spot 20 µm inside	88.9	75.9	7.2	ns	1.1	2.6	ns	nm
3 areas in middle 100 × 110 µm	96-100	84-6	9-10	0.4	0	3.5	ns	ns
Spot 5 µm inside	85.2	68.7	1.1	1.0	10.9	3.5	0	nm
At edge B	94.2	63.5	1.1	ns	23.3	2.3	nm	1.0

6. Æthelberht moneyer Notulf, Canterbury mint. Fig. 6, line scans and serial analyses. This specimen had a particularly variable appearance; these results refer to a part having an outer white/black phase and inner white/grey phase. Elsewhere only the white/grey pattern was present; this had a composition close to that of the 'area at middle' below.

The strip figures were averaged from sets of values obtained in 3 µm intervals.

At edge A	*100	84.3	5.1	1.0	(3.3)	1.0	5.2	0
At 3-6 µm in from A	*73.1	58.5	1.5	ns	(4.8)	ns	10.1	0.3
Strip by spot, 0-102 µm	*74.8	57.3	4.5	(0.7)	ns	ns	9.2	ns
Strip by spot, 102-162 µm	*68.6	22.6	40.0	2.5	ns	0	6.5	ns
Area $50 \times 55 \mu m$ at middle	*88.9	22.0	66.6	4.6	0	ns	6.1	ns
Spot central at 147 µm	*90.6	4.5	73.4	4.9	0	ns	5.5	0
At edge B	*99.6	55.1	35.8	2.0	0	ns	5.7	ns

7. Central fragment of a contemporary (870–972 AD) coin probably of the of the circumscription type. Although anonymous this piece is recorded because its composition is so extraordinary.

mous this piece is recorded becaus	e its composi	HOIL IS SO CAL	raorumary.					
Spot in edge A	*90.0	51.0	1.3	(0.3)	36.9	0	0	0.1
Area 50 × 55 µm adjacent to A *	79.8	34.3	15.1	2.1	27.7	0	"	ns
Spot 30 µm in from A	*94.0	46.9	1.2	0.9	44.8	0	(46)	ns
Area $50 \times 55 \ 150 \ \mu m$ from B	*69.2	40.3	12.2	2.2	14.0	ns	ns	0.3
Area 50 × 55 μm along edge B	*80.5	58.2	16.9	4.2	ns	(0.7)	(0.1)	0.5
At edge B	*100	89.0	3.9	6.2	0	(0.9)	(0.2)	ns

#### Discussion

The analyses give some explanation of the brittle nature of the specimens used in this study. The metals other than mercury which were used to alloy the silver would tend to undergo corrosion. Certainly our data are biassed by use of broken specimens. In this respect they resemble many other coins of the northern mints. Three intact coins of this period which we examined did not show traces of mercury on a polished edge. Our results only show that mercury in some form was applied to the surfaces of coins 3, 4 and 5 at some time. The appearance of internal mercury in quantity in coin 7 suggests that here the metal had been applied. The subject requires investigation using provenanced samples.

Turning to other sources mentioning mercurial plating, Oddy and Archibald<sup>11</sup> and La Niece<sup>12</sup>

<sup>&</sup>lt;sup>11</sup> W.A. Oddy and M.M. Archibald, 'The Technique of Some Forged Medieval Silver Pennies' in British Museum Occasional Paper No. 18 (1980), pp. 81–90.

<sup>&</sup>lt;sup>12</sup> S. La Niece, 'Metal Plating and Patination' in *Metal Plating and Patination*, edited by S. La Niece and P. Craddock, Butterworth, (London, 1993), pp. 201–10.

have described silvered forgeries of early medieval coins, and the latter author 13 in her description of the processes of silvering refers to the use by the Chinese of mercury in the first century AD. Possible use of mercury is not excluded by lack of availability at the time. The availability of mercury in Britain even before the period of issue of the coins tested (AD 820-970) is proved by its use in gilding. Its origin at this time is likely to be the Spanish deposit at Almaden. If indeed the mercury was applied at the time of minting, it was pointed out to us by Miss M. Archibald (pers. comm. to E.J.H.) that the moneyers, who were also merchants and known as 'pepperers' on account of the spices they carried, 14 were engaged in trade either directly or via France with Spain, so mercury would have been available to them. At a later date the names of moneyers, notably Deorman, on English coins are also recorded as being those of money changers and merchants.<sup>15</sup> Excavations at the sites of early mints might provide evidence for the use of mercury. Zinc, though not known at the time in Britain, was presumably added as brass made by a cementation process. It occurs in the Northumbrian styca coinage dating from AD 810.16

The variation of the composition across the thickness of the flan of specimens other than the first contrasts the information given by whole body analyses, as formerly done by chemical methods, and that obtained by localised analyses obtainable by electron microscopy. The former provides a weighted mean, and hence a value in terms of silver content, while the latter applies only to the area scanned under the electron beam, and only to a depth of a few µm, but allows details of the consistency of the composition to be examined. It is relevant that the high local concentrations of mercury were usually only exposed as thin lines on the surface. They could easily be missed or rendered insignificant in a large area scan across an edge. The localisation of mercury seen on our specimens 3-5 and 7 suggests that intact specimens of known provenance could conveniently be tested qualitatively by laying them out flat and directing the electron beam onto the surface. This action would neither require special treatment nor lead to damage.

Acknowledgements: This work was carried out at the Institute of Archaeology, University College, London. Our thanks are due to Mr M. Sharp of Messrs A.H. Baldwin & Sons for the gift of the fragments and the loan of some intact coins of the period and to Mr S. Laidlaw for the pictorial presentation. We received helpful advice from Dr J. Merkel and Dr P. Northover. The technical help and suggestions given to us by Mr K. Reeves were invaluable.

<sup>&</sup>lt;sup>13</sup> S. La Niece, 'The Technology of Silver-plated Coin Forgeries' in Metallurgy in Numismatics, Vol. III, edited by M. Archibald and M. Cowell, R.N.S Special Publication No. 23, (London, 1993), pp. 227-36.

<sup>14</sup> P. Nightingale, 'The Evolution of Weight Standards and the Creation of New Monetary and Commercial Links in Northern Europe from the Tenth Century to the Twelfth Century', EcHR (1985), 2nd Series 38,192-209, and P. Nightingale 'The London Pepperers' Guild and Some Twelfth Century English Trading Links with Spain', Brit. Inst. Hist. Res. 58, No. 138 (1985), 123-32.

15 P. Nightingale, (1995) A Medieval Mercantile Community, Yale University Press, New Haven and London, pp. 6-9 and 38-41.

<sup>16</sup> Harris, as in n.2, and Gilmore and Metcalf, as in n.3.

### THE MINT OF HUNTINGDON

#### ROBIN J. EAGLEN

#### Origins of Huntingdon

THE banks of the River Ouse were more suited to early settlement than the neighbouring forests and the extensive fens to the north and east. By Roman times the site of Huntingdon had become the crossing point of the river for Ermine Street, linking London to York, and for lesser roads from the direction of Cambridge and Sandy in Bedfordshire. The first substantial settlement at the crossing, however, was a Roman garrison and town on the south side of the river at Godmanchester, tentatively identified with the name *Durovigutum*.\(^1\) Although Godmanchester later became overshadowed by the growth of Huntingdon on the north side of the river, it retained its separate urban identity until the local government reorganisation of 1974.

The 'town of Huntingdon' is mentioned in the Laud version of the Anglo-Saxon Chronicle (s.a.656), describing the endowment of Peterborough Abbey.<sup>2</sup> This is unsafe evidence of urban development by that date since the text is judged to be a twelfth century fabrication.<sup>3</sup> In contrast, the Parker Chronicle provides a contemporary record of the Danish host abandoning their fortress at Huntingdon s.a.921 for a new one at Tempsford, between Bedford (which Edward the Elder had already taken from the Danes) and St Neots. Thereupon, Edward restored the fortifications at Huntingdon and admitted under his peace and protection 'all the original inhabitants who had survived in the district'.<sup>4</sup> This points to more than a transient Danish presence at Huntingdon, probably stemming from the armies' settlement of Mercia and East Anglia in the late 870s.<sup>5</sup>

#### Market and Mint

The Laud Chronicle also cites (s.a.963) a charter of Eadgar, containing the grant of a market at Peterborough and decreeing 'that there be no other between Stamford and Huntingdon'. Again, this is a weak testimony of an implied market at Huntingdon at that date because the charter is generally considered spurious. There is likewise no specific reference to a market in the Domesday Book entry, but the mention of 256 burgesses and of minting activity in the town would make the absence of a market by the late Anglo-Saxon period very implausible.

The earliest coins attributable with confidence to Huntingdon were struck in the reign of Eadgar by the moneyer Pirim. Other coins both of Eadgar and his predecessor, Eadwig, have with varying conviction or misgivings been assigned to the mint. They are included in the catalogue of coins below but should not be definitively admitted to (nor excluded from) the fellowship of Huntingdon coins without further convincing evidence. Accordingly, the catalogue numbers for die combinations other than those of Pirim are shown in parentheses. No Huntingdon coins are so far known from the reign of Edward the Martyr, but from Æthelred II onwards there are surviving coins from every reign until the end of Stephen's. Although the number known from William II and thereafter is small, this may reflect a decline in output as much as the vagaries of survival and discovery.

<sup>1</sup> H.J.M. Green, Godmanchester (Cambridge, 1977), p. 16.

<sup>&</sup>lt;sup>2</sup> The Anglo-Saxon Chronicle, translated and edited by G.N. Garmonsway, 2nd edition (London, 1955), p. 31.

Garmonsway, as in n. 2, p. xxxix, C.R. Hart, The Early Charters of Eastern England (Leicester, 1966), p. 21.

<sup>&</sup>lt;sup>4</sup> The Anglo-Saxon Chronicle, as in n. 2, pp. 101, 103, In English Historical Documents, c.500-1042, edited by Dorothy Whitelock, 2nd edition (London, 1979), p. 214, the date is amended to 917.

<sup>5</sup> The Anglo-Saxon Chronicle, as in n. 2, pp. 75, 77.

<sup>6</sup> The Anglo-Saxon Chronicle, as in n. 2, p. 116.

Hart, as in n. 3, pp. 25-6 (No. 15); P.H. Sawyer, Anglo-Saxon Charters (London, 1968), pp. 251-2 (No. 787).

<sup>\*</sup> The Phillimore edition of *Domesday Book*, translated and edited by John Morris (Chichester, 1975), renders 'toll and team' attaching to sixteen houses belonging to Countess Judith (fol. 203a) as 'market rights'. This is an unjustifiably broad interpretation of the phrase, given the context.

### Synopsis of Coinage

Figure 1 shows the number of coins, by reign, included in the study. These coins are listed in the catalogue of coins by type, moneyer and die combination. Where possible, the weight of the coins is recorded, indicating those affected by wear or disfigurement. Figure 2 shows the 'equivalent' reverse dies where the number of known surviving coins justifies such calculations by type and /or reign, using the formula<sup>9</sup>

total number of (known) coins × total number of reverse dies

total number of (known) coins minus total number of coins
uniquely representing a reverse die ('singletons').

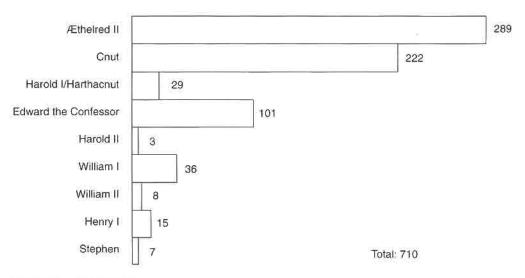


Fig. 1 Number of coins in study.

In Table 1 these calculations are compared with those made by Metcalf, relating the coins recorded in Mossop's die study of the Lincoln mint to the Lincoln coins recorded in the systematic collection at Stockholm by Hildebrand and in the Copenhagen sylloge, and applying the resulting relationship to the other mints so recorded. <sup>10</sup>

Brooke, writing in *The Victoria History of the County of Huntingdon* in 1932, stated that 'the comparative scarcity of coins of Huntingdon prevents a satisfactory estimate of the number of moneyers employed'. Sufficient coins are now known to attempt this task. Figure 3 shows, from the number of moneyers at work in any one type, an estimate of the minimum complement of moneyers at different times. The number of moneyers at work together is calculated from those who were active in consecutive types and those with an unusual name, when there is a gap of only one or two types between their issues. A moneyer whose coins are known of only one type is discounted unless there is at least one moneyer for that type who was also active in the preceding and following type. When the type can be divided into, say, early and late output on the basis of weight or other criteria, it is possible to produce a more sophisticated calculation, and this may

<sup>&</sup>lt;sup>9</sup> See Stewart Lyon in H.R. Mossop, *The Lincoln Mint* (Newcastle upon Tyne, 1970), pp. 15–17, where he points out that the formula is likely to result in underestimates of die usage because it hypothesises equal output from known and unknown dies, whereas the number of unknown dies may exceed the estimate owing to their having been less extensively used. The formula was found to yield comparably useful results when assessed alongside various other methods by G.F. Carter in 'Comparison of methods for calculating the total number of dies from die-link statistics' in *Statistics and Numismatics*, edited by C. Carcassonne and T. Hackens (*Pact* 5, 1981), pp. 204–13.

D.M. Metcalf, 'Continuity and Change in English Monetary History', Part 2, BNJ 51 (1981), 52-90, at pp. 82-3.

<sup>11</sup> The Victoria History of the County of Huntingdon, (London, 1932, reprinted 1974), I, p. 122.

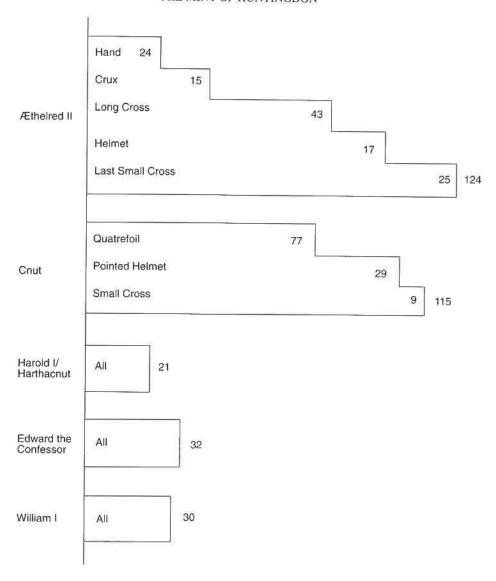


Fig. 2 Number of 'equivalent' reverse dies.

increase the estimated complement, especially when there are a number of moneyers only active in a single type. The effect of this will be seen in the Helmet type of Æthelred II and Quatrefoil type of Cnut, and has been reflected in the Figure. 12

The contribution of Scandinavian finds to our knowledge of Huntingdon coins is demonstrated by Table 2, showing the number of coins for the reigns of Æthelred II, Cnut and Edward the Confessor (up to and including the Small Flan type), derived from Scandinavian hoards compared with 'others'. The latter category includes not only coins known to have been found in England and elsewhere outside Scandinavia, but also coins of unknown provenance currently in such countries, some of which could, of course, have originated from Scandinavian hoards. The percentage of coins from Scandinavian hoards is thus likely to be understated. Despite this dominance, the 'Cnut' hoard (c.1993) of English origin, to be discussed below, alone accounts for almost thirty per cent of the coins of Cnut included in the catalogue of coins.

The coinage of Huntingdon will now be considered in detail by reign and type.

<sup>12</sup> See Tables 7 and 14.

TABLE 1: 'Equivalent' reverse dies at Huntingdon.

	Number	r of coins	Number	of dies
Reign/Type	Metcalf	Eaglen	Metcalf	Eaglen
Æthelred II				
Hand	4	16	22	24
Crux	6	37	19	15
Long Cross	21	151	31	43
Helmet	11	43	20	17
Last Small Cross	17	42	28	25
Sub-total	59	289	120	124
Cnut				
Quatrefoil	25	94	40	77
Pointed Helmet	33	88	27	29
Short Cross	9	39	7	9
Sub-total	67	221	74	115
Harold I/				
Harthacnut	13	29	16	21
Edward the Confessor (PACX to Small Flan)	9	38	12	20
Total	148	577	222	280

TABLE 2: Number of Huntingdon coins from Scandinavian and 'other' hoards.

Reign	Scandinavia	n hoards (%)	Other		
Æthelred II	181	(63)	108		
Cnut	116	(53)	105		
Harold I/Harthacnut					
Harthacnut	18	(62)	11		
Edward the Confessor <sup>a</sup>	12	(32)	26		
Total	327	(62)	250b		

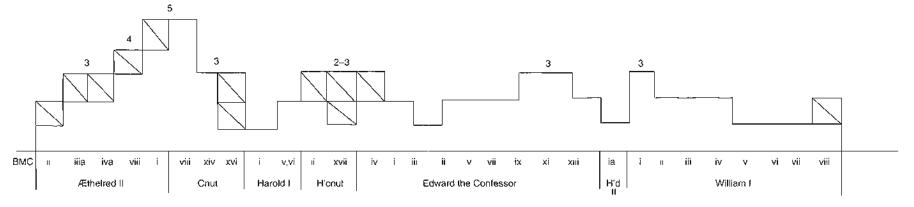
<sup>&</sup>lt;sup>a</sup> Figures relate to first four types only.

#### Æthelred II

In this study, the largest number of coins (289) and 'equivalent' reverse dies (124) are from the reign of Æthelred II, followed by Cnut (222 and 115 respectively). Table 3 shows the number of coins by type for the twelve moneyers minting under the Huntingdon signature during the reign. Only one of these, Osgut, bore an Old Norse rather than an Old English name. This, alongside the lack of Scandinavian place names in the area, may reflect the Saxon inhabitants acquiescing in Scandinavian rule rather than extensive Viking settlement in this part of the Danelaw. One or two moneyers appear to have supplied most of the coinage at any one time, with other moneyers playing a minor role. This phenomenon continues under Cnut.

<sup>&</sup>lt;sup>b</sup> Seventy-three coins (29%) of this total are from the 'Cnut' hoard (c. 1993).

Pauline Stafford. The East Midlands in the Early Middle Ages (Leicester, 1985), pp. 116–17.



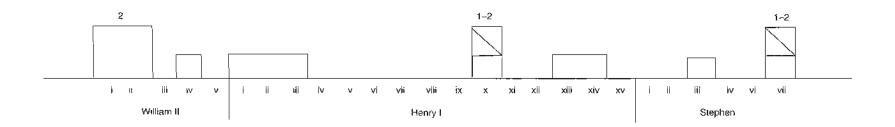


Fig. 3 Minimum complement of moneyers at Huntingdon.

TABLE 3: Huntingdon moneyers under Æthelred II.

Number of coins by type

Moneyer	First Hand	Second Hand	Crux	Long Cross	Helmet	Last Small Cross	Cnut Quatrefoil
Ælfric	14	1	30	96			
Wulfgar	1						
Leofric			4	0	0	1	(?)
Osgut			3	52	8		
Eadwine				3	1	:	4374
Æthelstan					26	5	Yes
Cniht					1	TIE	25
Sæwine					6	15	Yes
Ælfget						1 17	Yes
Ælfnoth Æthelweard						2	Yes
Manwine						1	(2)
unidentified					4	•	(0.3
MIII GOILLIA	-				.659		Total
Total	15	1	37	151	43	42	289
Number of							
O. dies	8	Ĩ	13	31	16	20	89
R. dies	11	1	13	39	15	19	98
R. dies							
(equivalent)	2	24	15	43	17	25	124
moneyers	2	1	3	3+	5+	7	12

Table 3 also shows the total 'equivalent' reverse dies for each type. The peak reached in the Long Cross type, also contributing half of the total of known coins from the reign, is doubtless responding to the call for tribute payments. The lower die usage at Huntingdon in the preceding Crux type contrasts with other mints in the Southern Danelaw and, presumably, reflects an unexplained lesser contribution to the geld at that time. A close analysis of the connection between tribute and geld payments and mint output is not productive given our uncertainty about the accuracy and completeness of the payments recorded in the Anglo-Saxon Chronicle and the accurate dating of the coin types.

As the reign progressed, the minimum number of moneyers in office together at Huntingdon rises from two at the beginning to four in the Last Small Cross type. In spite of this, the level of activity measured by equivalent reverse dies slackens in the Helmet and Last Small Cross types. This decline does not appear to be imputable to statistical bias arising from the smaller number of surviving coins.

<sup>&</sup>lt;sup>14</sup> D.M. Metcalf, 'The Ranking of the Boroughs: Numismatic Evidence from the Reign of Æthelred II', in Æthelred the Unready, edited by David Hill, BAR British Series 59, (Oxford, 1978), 159–212, at p. 212.

The 'Hand' types (BMC iia, d; Hild. B1,2) yield only sixteen coins of Huntingdon. Of these, fourteen are First Hand (BMC iia) coins of Ælfric – who also provides the only Second Hand (BMC iid) coin known - and one is of the moneyer Wulfric. No examples of Benediction Hand (BMC iif, Hild. B3) have so far come to light. With this modest sample it is unsafe to try to draw firm conclusions. Nevertheless, from the proportion of 'singletons' (Ælfric's fifteen known coins being struck from eleven different reverses) it is clear that we have a very incomplete picture of the dies used. Lyon's argument that Second Hand was not a distinctive issue from First Hand also appears to be supported.15 The Second Hand coin weighs 1.26 g, compared with an average/median for Ælfric's First Hand output, using obverses A to F, of 1.58 g. This suggests that it was struck late in the 'Hand' period. Only one of Ælfric's First Hand coins weighs lighter than this (1.21 g) and is also conspicuous as the only specimen from Huntingdon with a round sleeve on the reverse (dies Gm). This feature is identified with a Southern (London ?) die-cutting workshop, whereas the remaining coins all have a square sleeve identified with an East Anglian (Norwich?) workshop.<sup>16</sup> At other times Huntingdon moneyers appear to have resorted to London for dies to strike light (late) coins, which may have arisen as provincial workshops ceased operating before the introduction of a new coin type. The sole coin of Wulfgar is also relatively light at 1.39 g but, so far, no coins have been discovered of the following Crux type in his name.

The two First Hand coins struck from dies Ei and Ej merit comment. Any suspicions aroused by the blundered reverse of Ei (ELFHIC M-O HVNTANN) are assuaged by the use of the same obverse with an impeccable reverse die (Ej). The latter coin was one of a number of Huntingdon coins of various reigns stolen from the Norris Museum at St Ives in 1964, which the malefactor then set about selling. Seabys were offered some of them and were told that they had been found by the vendor's grandfather at Hemingford Grey, a village close to Huntingdon. Seabys ticketed the coins accordingly. However, suspecting the explanation, Seabys made enquiries as a result of which the coins offered to them were restored to the museum. The tickets still remain with the coins to divert those who know the circumstances and ensnare those who do not into believing a spurious provenance. Before the theft, in 1958, Christopher Blunt had visited the museum and photographed its Huntingdon coins. From the plates it appears that fourteen coins were still missing after Seabys' intervention. Twelve of these suddenly surfaced in the Glendining sale of 11 October 1993 and were duly withdrawn and returned to the museum, leaving only two coins unaccounted for.<sup>17</sup>

Bill Lean has drawn the author's attention to Oswig at the neighbouring mint of Bedford using the First Hand obverse A of Ælfric. As Oswig's coin, from the Castle Street (2) hoard, Dublin, was struck from rusty dies, we may presume that he took the die over from Ælfric. A large fragment from Ælfric's output of dies Aa was in the Castle Street (1) hoard. This may be a coincidence, rather than indicating that the two moneyers were operating in tandem, because this fragment is not pitted like Oswig's example. So far, only one other example has been identified of the same obverse die being used at Huntingdon and at a neighbouring mint, involving Cambridge in the Helmet type of Æthelred II. The transfer (or sharing) of dies between moneyers at Huntingdon is almost equally rare, found to date only in the Helmet and Last Small Cross types of Æthelred II and late in the reign of Edward the Confessor. The incidence is greater of obverse dies being used at Huntingdon and mints further afield, especially in the Long Cross type of Æthelred II, and this apparent anomaly is discussed below.

<sup>15</sup> Stewart Lyon, 'Some problems in interpreting Anglo-Saxon coinage', Anglo-Saxon England 5 (Cambridge, 1976), 173-224, at p. 200.

Michael Dolley and Tuukka Talvio, 'The Regional Pattern of Die-Cutting Exhibited by the First Hand Pennies of Athelred II Preserved in the British Museum', BNJ 47 (1977), 53-65, at pp. 59, 63.

<sup>&</sup>lt;sup>17</sup> SCBI South-Eastern Museums 1112 and 1121. On the loss and recovery of the coins see SCBI South-Eastern Museums, pp. 13–14. NCirc (February, 1994), 9, where David Symons reviews the sylloge and NCirc (April, 1994), 106–7, a letter from the author where a typographical error shows the date of the Glendining sale as 1992 instead of 1993.

### Crux type

In the standard Crux type, (BMC iiia; Hild. C) Ælfric employed two pairs of obverse dies with single reverses (ADa, BEc). The fourteen intact coins struck from these dies have a weight spread between 1.62 g and 1.48 g. The average and median weight of these coins is 1.57 g which is conceivably the standard to which they were struck. Since, however, six of the coins weigh between 1.62 g and 1.60 g, and a further six between 1.55 g and 1.52 g, it is just possible (although unlikely) that the coins were struck with remarkable precision to two separate weight standards. Petersson identified more than one weight standard in the type, but he was probably referring to the weight differences between the standard and light issue about to be considered. <sup>18</sup>

A distinct group of Crux pence (Gm, Ho, Iq, Js) was struck by Ælfric on perceptibly smaller flans and was markedly lighter, in the range 1.28 g–1.01 g. All the recorded Crux coins of the moneyers Leofric and Osgut are similarly light, between 1.32 g and 1.16 g. The dies used are stylistically similar to those of the heavier coins, if less neatly executed. The king's name is rendered as EDELRED on obverse J used by Ælfric and the mint town usually reads HVNTA or NVNTA rather than HVNT, which is invariably found on Ælfric's obverses in the standard issue. Only one of the coins has the sceptre intercepting the drapery (Ælfric, J) and none the back-swept hair associated with the variety Hildebrand designated as 'Ca' and known as Small Crux. <sup>19</sup> That the coins were struck late in the Crux issue is supported by the appearance of Osgut, who also struck in the next two types but is unknown in the preceding Hand issues. From the surviving coins of the other moneyer, Leofric – four light Crux and one Last Small Cross – the pattern of his career is less clear.

No differentiation is found in the distribution of heavy or lighter weight coins of the Crux type between the Scandinavian hoards and 'other' coins.

### Long Cross type - Die usage

More coins of the Long Cross type of Æthelred II (BMC iva; Hild. D) are known from Huntingdon than for any other type, although the number of surviving dies and estimated 'equivalent' reverse dies are greater in the Quatrefoil type of Cnut. Both Ælfric and, to a lesser extent, Osgut were active moneyers, whereas the only other one known, Eadwine, is only represented by a single reverse used with three separate obverses. Ælfric uses one reverse with two obverses (KLv) and, in the subsidiary Long Cross variety, 20 one of his reverses with three obverses (ABCa), and Osgut one of his with two obverses (ABa). In the standard issue Ælfric uses three reverses (lmn) with obverse E but one of them (1) also with obverses F and G. Remarkably, obverse F has been dielinked to a Scandinavian reverse, suggesting that at some stage it fell into Viking hands. The same fate appears to have befallen Ælfnoth's dies Aa in the Last Small Cross issue of Æthelred II. Otherwise, both Ælfric and Osgut normally appear to have used an obverse with one or more reverses, up to four (Ælfric, Bcdef, Hiopq) or five (Osgut, Dfghij). One of Ælfric's group of three reverses (Cghi) is linked to another group of four (Hiopq), whereas Osgut has two obverses used interchangeably with two reverses (ABab) and one reverse common to a set of three and six dies (Cef, Dfghij). The evidence thus points to great fluidity at this time in the arrangements for issue and use of dies at Huntingdon. This is reinforced by the instances where obverse Long Cross dies of Ælfric and Eadwine were also used by moneyers at other mints. Those so far identified are set out in Table 4 and referenced in the catalogue of coins. The author is grateful to Bill Lean and Stewart Lyon for the information contained in the Table.

H. Bertil A. Petersson, 'Coins and Weights. Late Anglo-Saxon Pennies and Mints, c.973–1066', Studies in Late Anglo-Saxon Coinage, edited by Kenneth Jonsson, Numismatiska Meddelanden xxxv (Stockholm, 1990), 209–353, at p. 227.

See B.H.I.H. Stewart, 'The Small Crux Issue of Æthelred II', BNJ 28 (1957), 509-17.

<sup>&</sup>lt;sup>20</sup> See Veronica M. Smart, 'A Subsidiary Issue of Æthelred's Long Cross Type', BNJ 34 (1965), 37–45. In the present paper the issue is referred to as a variety, representing a late regional die-cutting style.

TABLE 4: Æthelred II, Long Cross type. Obverse die links between Huntingdon and other English mints.

Huntingdon	Obverse	Other	
Moneyer	die	Mint(s)	Moneyer
Ælfric	I J K	Rochester	Eadwerd
	K	London	Æthelweard Eadmund
		W	Godman
		000	Heawulf
	D (subsidiary issue)	Southwark	Eadwine
Eadwine	Α	London	Leofnoth
	В	18	Eadric (or Godric)
	C	Buckingham Hertford	Ælfwig Godric
Osgut	<del></del>		=4

Sharing of obverse dies between moneyers at different mints could have arisen either by transfer of the dies from one centre to another, or from the moneyers operating, exceptionally, from the same workshops. The pattern of use points strongly towards the latter. Two obverses were shared by Ælfric with Eadwerd of Rochester. Another obverse was shared between Ælfric and four separate London moneyers. The obverse thus employed (K) was combined with Ælfric's reverse v, itself used (as far as is known) exclusively with two obverses (KL). Most significantly of all, Eadwine used a single reverse die with three obverses shared respectively with two London moneyers (AB), and one each from Buckingham and Hertford (C). This suggests that these moneyers may all have been operating at that time from London and drawing upon a pool of obverses for use with their own reverse dies. Combining resources was perhaps the most expeditious way to convert locally collected bullion into coin to meet pressing geld commitments. None of the fourteen coins struck from these obverses weighs more than 1.37 g.

### Long Cross type – Weight standards

Taking coins struck from individual die pairings and die-linked coins together as distinct groups, the weight ranges within which they were struck fall into relatively narrow bands, with the exception of one pairing of Ælfric Aa with an exceptionally heavy coin (1.80 g). Another pairing Ho has an apparently maverick spread between 1.58 g and 0.97 g but all the coins weighing less than 1.46 g are either corroded or fragmentary. Obverse die B of Ælfric is especially informative. The twenty-two known coins are used with four reverse dies (cdef). The average weights of intact coins struck from these reverses are closely similar: c (1.65 g: 11 coins), d (1.62 g: 5 coins), e (1.64 g: 3 coins) and f (1.57 g: 1 coin). More importantly a horizontal neck flaw develops during the use of the obverse and the spread and average weights correspond closely between the coins struck before and after this flaw has developed:

	No. of coins	Average weight (g)	Spread (g)
Pre-flaw	6	1.65	1.71 - 1.57
Post-flaw	14	1.63	1.72-1.53

This suggests that the twenty coins were all struck to the same standard of approximately 1.63 g or 1.64 g with outer limits of deviation arising in the sample of 0.08 g (5%) above and 0.11 g (7%) below the standard. In reverse d a horizontal flaw also develops, and this results in a similar snapshot, the sole unflawed coin weighing 1.65 g and the four flawed coins having a spread of 1.68 g–1.53 g and an average weight of 1.62 g.

Since the weight range of die-linked coins from Huntingdon in the Long Cross issue is relatively narrow it is possible, by plotting the spread of weights and calculating the average and median of each group, to arrive at the likely standard to which the coins were struck. This exercise is based on the rational assumption that the small resulting deviations were not the reflection of an intricate manipulation of weight standards. The raw data is set out in Table 5 and supports the operation at Huntingdon of three standards during the Long Cross issue at approximately 1.63 g, 1.51 g and 1.30 g, with a deviation from the median value of + or - 6%. Given the level of accuracy to which the mint workers were capable of operating, standards with as little as a 0.12 g difference were sufficiently differentiated. Petersson also concluded that more than one standard applied at Huntingdon in the Long Cross as well as the Crux type.  $^{21}$ 

TABLE 5: Æthelred II. Long Cross type. Weight analysis.

50	2	as a a son	0	Weight(g)	
Moneyer	Dies	Number of coins	Average	Median	Spread
Ælfric	Aa	6	1.67	1.67	1.80-1.57
	Bcdef	20	1.64	1.66	1.72 - 1.53
	Cghi 7	3	1.56	1.56	1.60 - 1.52
	Dj	(1)	1.51	1.51	1.51
	Elmn ]	6	1.46	1.45	1.51-1.43
	FGI	3	1.36	1.36	1.38 - 1.34
	Hiopq	10	1.52	1.52	1.58-1.46
	Irs	3	1.23	1.32	1.35 - 1.02
	Jt	2	1.33	1.33	1.34-1.32
	KLv	2 6	1.30	1.31	1.37 - 1.14
(subsidiary)	ABCa	17	1.30	1.28	1.43-1.18
N8 8∓45	Dg	1	1.33	1.33	1.33
	Eij	1	1.30	1.30	1.30
	Fk	1	1.25	1.25	1.25
	Gm	2 2	1.11	1.11	1.16-1.06
Eadwine	A(B)Ca	2	1.18	1.18	1.34-1.02
Osgut	ABab	13	1.66	1.65	1.80~1.54
5	Cef	7	1.55	1.55	1.70-1.40
	Dghfi	18	1.41	1.41	1.60-1.26
	Ek	1	1.28	1.28	1.28
	Fm	2	1.18	1.18	1.30-1.06
(subsidiary)	Aa	1	1.30	1.30	1.30
6 8500	Ce	1.	1.33	1.33	1.33

### Long Cross type – Additional symbols

In the Long Cross type special additional symbols make their appearance on certain Huntingdon coins. These are in the form of pellets added to a sector of the reverse cross. They are only found on coins of Osgut, both in the standard and subsidiary variants. One reverse of Osgut (k) shows the pellet within an annulet. As the symbols occur in the same position on each coin struck from the same die and protrude from the surface of the coin, the feature was clearly engraved on the die itself. The absence of any coins from such dies without pellets also suggests that the dies were issued with the feature and not modified after receipt at the mint. No satisfactory explanation has been given for such symbols. They could have been used to signal some special physical attribute of the coins themselves or a peculiarity in the arrangements under which the coins were struck or issued. The possibility of their being a decorative whim of bored engravers must be discounted.

<sup>21</sup> Petersson, 'Coins and Weights', as in n. 18, p. 227.

The most tempting explanation is that the symbols signify coins struck at an abnormal weight, logically (but not inevitably) lighter than the standard. They could also indicate abnormal purity or that the bullion had not been assayed because, for example, of the urgency to strike currency to meet tribute payments. In such cases, the purpose of the symbols would be to absolve the moneyer from future censure for deviating from the standard.

Unfortunately, to the best of the author's knowledge, no metallurgical analysis has been carried out on pelleted Huntingdon pennies. On the question of weight, combined use by Osgut of pelleted and unpelleted reverses with the same obverses in the standard issue enables weight differences (if any) to be readily identified. The combinations are obverses AB with reverse a (pelleted) and b (unpelleted); C with e (pelleted) and f (unpelleted) and D with ghf(j) (unpelleted) and i (pelleted). The number of intact coins, and their average, median and spread of weights, are set out in Table 6. This shows that the weight variations for pelleted and unpelleted reverses used with obverses A and B were negligible, but with a pelleted reverse providing the heaviest coin (1.80 g). Again, although the number of coins is small, no discernible differences are apparent in the use of obverse C. With obverse D the results again are statistically comparable, although here the pelleted coins are marginally lighter than the unpelleted. The weight spread (1.60 g-1.26 g) in the use of obverse D suggests that it may have been deployed to strike coins at successive weight standards. The same may also be true of obverse C. The conclusion from the sample studied must be that at Huntingdon, at least, the pellet marks in the Long Cross type were not indicative of weight manipulations. Examples occur of pellets in each quarter of Osgut's reverses, but there are no obvious differences to suggest that the choice of quarter had significance.

TABLE 6: Æthelred II. Long Cross type, standard issue. Weights of pelleted and unpelleted coins of Osgut.

<i>O</i> .	R."	Number of coins	Average	Weight (g) Median	Spread
AB	a*	8	1.68	L.64	1.80-1.60
	b	5	1.63	1.65	1.69-1.55
C	e*	6	1.55	1.56	1.70 - 1.40
	f	I	1.55	1.55	1.55
D	fghi(j)	14	1.43	1.42	1.60 - 1.28
	i*	4	1.37	1.32	1.56-1.26

a Pelleted reverses are asterisked.

The question should be asked whether Osgut's pelleted dies were being used by the more active moneyer, Ælfric. The answer would appear to be not, on two counts. First, pelleted reverses are found die-linked to unpelleted reverses of Osgut. Secondly, none of his pelleted reverses is found die-linked with obverses used by Ælfric.

Using Mossop's die study of the Lincoln mint for comparative purposes, <sup>22</sup> eight of its sixteen Long Cross moneyers used reverses with added symbols. These are predominantly in the form of a pellet in the second quarter, but the moneyer Dreng also has the letter D in the third quarter of one die and a small cross in the second quarter of two others. A similar cross is encountered in the third quarter of reverses inscribed with the names of Æthelstan and Godleof at Huntingdon in the Quatrefoil type of Cnut, to be discussed below. As at Huntingdon, there is nothing to suggest that the symbols at Lincoln were weight related. The weight spread of thirty recorded coins, excluding those of Wulmær considered not to be of English work, ranges from 1.58 g to 1.07 g, giving a wider spread at the lighter end than at Huntingdon.

In conclusion, the symbols appear (subject to metallurgical tests) to have some unidentified administrative significance rather than to refer to the physical characteristics of the coins. Pellets

<sup>22</sup> Mossop, The Lincoln Mint, as in n. 9, Plates VIII-XVI.

or other symbols also occur at Huntingdon in the Helmet type of Æthelred II, the Quatrefoil and Pointed Helmet types of Cnut and the Trefoil – Quadrilateral and Expanding Cross types of Edward the Confessor. These are dealt with under those types since it should not be assumed that the meaning of such symbols is constant at different periods.

### Long Cross type - Comparison of the standard issue and subsidiary variant

The subsidiary variant at Huntingdon displays characteristic attributes beyond the angular bust and the light weight shared by presumed late coins struck with standard obverses. Most of the obverses of Ælfric and Osgut in the standard issue read REX ANGLO, whereas in the subsidiary variant the inscription is shorter and, for Ælfric's dies, sometimes irregular: REX AIG (obverse G) and RE AIGO (obverses ABE), the latter reading accompanied by crude, thug-like styles of bust. Another anomaly is the use of D instead of D in the king's name. Irregularities are also occasionally found in the standard issue, however, one obverse of Ælfric reading RE+ ANGL, with a crude accompanying bust (E) and two of Osgut reading RE+ ANGO and RE+ ANG (D and F respectively). Virtually all the reverses, whether of the standard issue or subsidiary variant, render the mint town as HVN(T), often with a quixotic N instead of the initial letter H. Osgut, however, uses one subsidiary reverse reading VNTD (a), and this is matched by a die of the same reading in the standard issue (k). The only known reverse of Eadwine reads uniquely, but logically, HVNTE. With the possible exception of Osgut's die D, none of the standard dies with irregular characteristics is found at the highest weight, suggesting that deviations from the REX ANGLO/NVNT norm gradually crept in during the currency of the type, affecting alike the standard issue and subsidiary variant.

#### Helmet type

Although only forty-three coins are recorded at Huntingdon for the Helmet type of Æthelred II (BMC viii, Hild. E), the sixteen obverse and fifteen reverse dies appear to represent substantially, if not entirely, the die usage in that type. The 1:1 ratio of dies is in marked contrast with the preceding issue. The mint's activity, measured by estimated reverse dies, declines to forty per cent of the level in the preceding type, despite an increase in the minimum number of moneyers concurrently at work. Æthelstan replaced Ælfric as the leading moneyer, and may have had simultaneous access to a number of the obverse and/or reverse dies set out in Figure 4.

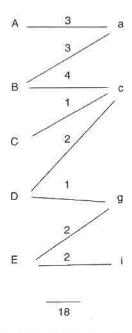


Fig. 4 Æthelred II, Helmet type. Æthelstan die-chain, and number of coins.

### Helmet type - Weight standards and complement of moneyers

All except two coins in Æthelstan's chain A–E are in the weight range 1.51 g–1.40 g (average 1.45 g) whereas those struck from Ei weigh 1.28 g and 1.27 g respectively. This points to a change in weight standard late in the chain. This hypothesis is supported by the other recorded coins. Æthelstan himself struck two coins from dies Fk at 1.49 g and 1.48 g respectively, which should perhaps be placed at the beginning of his output. Both Osgut (Aa) and Sæwine (Aab) also struck to a mean weight of 1.43 g/1.42 g. At the lower weight Osgut struck a coin from dies Cc weighing 1.29 g as did Eadwine (Aa). The other die combination known for Osgut (Bc) includes one coin recorded as the heaviest in the type, at 1.59 g. This may be a maverick striking, rather than an indication of a change in standard during the life of the die, as three other coins struck from the same reverse, but using two obverses (BCc) average 1.27 g.

Importantly, Æthelstan's free-standing dies Gm show pellets in the first and third quarters of the reverse cross. The three known coins weigh 1.29 g-1.24 g (average 1.27 g) both supporting a standard at that level and militating against the hypothesis that the pellets signified output below the normal weight standard in the Helmet type.

The evidence thus points to an initial weight standard of about 1.45 g, falling to around 1.29 g–1.27 g. In addition there are two coins of Æthelstan (Ho) struck at 1.19 g and 1.17 g respectively, another (Iq) at 1.16 g and the sole coin of Cniht at 1.12 g. Die H is very unusual in the Huntingdon series in that it was also used by Osgut (as die C) to produce a coin at 1.29 g.<sup>23</sup> Given that Osgut is not known after the Helmet type, the likelihood is that when he ceased operating (in abnormal circumstances?) his die was taken over by Æthelstan and that the late, light coins just referred to represent a second reduction in the weight standard. Insufficient coins have so far come to light, however, to pinpoint the actual standard. Metcalf identified a peak at just over 1.4 g in the type but with lower standards detectable 'or suspected in the easterly shires as usual'.<sup>24</sup>

With a framework of three standards it is possible to obtain a clearer idea of the number of moneyers in office together, as Table 7 demonstrates. Without subdividing the type in this way the complement cannot be safely numbered beyond two, as in the preceding Long Cross type.

	Long		Helmet		Last
	Cross	Early	Mid	Late	Small
Moneyer		(1.45 g)	(1.28 g)	(± 1.17 g)	Cross
Æthelstan		+	+	<b>(#</b>	4
Cniht				4	
Eadwine	a <del>t</del>	0	+		
Osgut	1744	+	+		
Sæwine	×4	+:	O	O	+
Complement	:=	4	4	3	12

TABLE 7: Æthelred II, Helmet type. Complement of moneyers.

#### Helmet type – Links with Cambridge mint

In the Helmet type there are two clear links between Huntingdon and the neighbouring mint of Cambridge. First of all, one of Osgut's obverses (B) was also used by the Cambridge moneyer

<sup>23</sup> Other instances occur in the Last Small Cross issue of Æthelred II (Æthelstan obverse A, Sæwine B) and under Edward the Confessor (see Figure 6).
24 D.M. Metcalf, An Atlas of Anglo-Saxon and Norman Coin Finds, c.973–1086 (London, 1998). p. 128.

Leofsige.25 The state of the striking and weight (1.10 g) of Leofsige's example indicates that the die passed to Cambridge late in the issue, possibly again when Osgut ceased operating. Secondly, a moneyer named Cniht was active in the Helmet and Last Small Cross types (and beyond) at Cambridge. Given the rarity of his name, it is virtually inconceivable that they could be different persons. The light weight (1.12 g) of the sole Huntingdon coin makes it clear that his sojourn at Huntingdon was an interruption or extension to his activities at Cambridge. Maybe he took Osgut's die B back with him. Another possible link exists through the moneyer Eadwine, known at Huntingdon from three coins in the Long Cross issue and from one coin in the Helmet issue. A moneyer of the same name was active in Cambridge in the same issues and could conceivably be the same person, since the name is not that common. A like possibility could be argued, if less forcibly, for the moneyer Ælfric who was active at Cambridge in the Crux and Long Cross issues, with a namesake at Huntingdon from First Hand through to Long Cross.<sup>26</sup> Ælfric was a prolific moneyer at both mints in the Crux issue, Ælfric the pre-eminent moneyer at Huntingdon in the Long Cross issue and Eadwine in the Long Cross issue at Cambridge. This could imply that these men were the 'professionals' amongst the local fraternity of moneyers at the time and thus in demand and capable of fulfilling a role at more than one mint in an area, as needed. Such correspondence of names between the two mints does not otherwise so clearly occur other than in the reign of Edward the Confessor, so the possibility of it being a coincidence - with the exception of Cniht – should not be discounted.

## Helmet type and Viking attacks

The confluence at Huntingdon of a number of unusual events in the Helmet issue – obverses passed from moneyer to moneyer, or mint to mint, the loan of a moneyer, and very light coins – may be more than chance and symptomatic of disruption in the smooth running of the mint. The Anglo-Saxon Chronicle records in 1010 the sacking of large areas, including 'half of Huntingdonshire'.<sup>27</sup> The destruction of Cambridge and Thetford and the presence of the Danish Army at nearby Tempsford are specifically recorded. No mention is made of Huntingdon as such but it is hard to imagine that the town escaped the Viking swords and torches. To attribute the unusual occurrences as the outcome of the attack on Cambridge and Huntingdon (or Cambridge alone) must be speculative, but the author knows of no other circumstances in the Huntingdon coinage of Æthelred II which could so clearly point to such an upheaval. However, for this association to be valid, the dating of the Helmet type would have to be extended until at least 1010, at variance with other evidence for the introduction of the abortive Agnus Dei (BMC xi, Hild. G) and Last Small Cross types in c.1009.<sup>28</sup>

#### Helmet type - Design and execution

As with the Long Cross issue, the obverse dies of the Helmet type show considerable disparity in the skills of design and execution. Some of Æthelstan's in particular are crudely conceived and allied to unusual or irregular legends. The king's name may begin with ED instead of ÆĐ (dies B,C,D,E) and the abbreviation of the country name be strangely expressed as A[L]O (die C), and EIGO (dies D,E). However, the extensive die-linking in Æthelstan's output associates these runts with other offspring of impeccable pedigree, to dispel doubts about acceptance of these coins as official products of the mint. Furthermore, the reverses appear beyond suspicion. The mint name

<sup>&</sup>lt;sup>25</sup> Kenneth A. Jacob, 'The Mint of Cambridge', Part I, SCMB (February 1984), 34–43, at p. 38. See Baldwin auction, 2 May 1996, 424 (illustrated). Coin bequeathed to the Fitzwilliam Museum, Cambridge.

<sup>26</sup> Jacob was unable to identify any obverse die links of Eadwine or Ælfric between the two mints amongst the coins of Cambridge known to him and of Huntingdon to the author in 1983.

<sup>&</sup>lt;sup>27</sup> The Anglo-Saxon Chronicle, as in n. 2, pp. 140-1.

<sup>&</sup>lt;sup>28</sup> C.S.S. Lyon, 'The Significance of the Sack of Oxford in 1009/1010 for the Chronology of the Coinage of Æthelred II', *BNJ* 35 (1956), 34–7. Michael Dolley and Tuukka Talvio. 'The Twelfth of the Agnus Dei Pennies of Æthelred II', *BNJ* 47 (1977), 131–3.

receives varied treatment, all of Æthelstan's reading HV (or NV) with the exception of one, rendered as VNT. HVNTA is found on coins of Eadwine, Osgut and Sæwine. Osgut also uses VNTD and Cniht (the visiting moneyer) the most explicit reading, HVNTAD.

### Last Small Cross type

In the Last Small Cross type (BMC i, Hild. A) the number of coins in the study (forty-two) is similar to the preceding type and, although the known moneyers increase from five to seven, the minimum complement of moneyers remains at four. The surviving singletons, compared with two or more coins struck from the same dies, signal that a greater number of reverse dies were in use: twenty-five 'equivalent' reverse dies, as against fifteen in the Helmet issue, but with the recorded reverses again not exceeding the total known obverses. This recovery in activity still falls far short of the level attained in the Long Cross issue. It is strange that a lesser demand for coinage in both the Helmet and Last Small Cross types should have been met by a greater complement of moneyers. The explanation may be that demand for their services was sporadic but intense when it arose.

### Last Small Cross type - Weight standards

The under-representation of dies, deriving from a similar number of coins, makes it more hazardous to calculate the likely weight standards in use at Huntingdon in the Last Small Cross type. This is compounded by the greater spread of weights evident from those coins which do survive. The most widely represented die pairing (Ælfnoth, Aa) has two coins averaging 1.74 g and four coins averaging 1.28 g, clearly representing distinct standards. As will be seen from the catalogue of coins, these dies appear to have eventually fallen into Scandinavian hands. The die chain Æthelstan (Aa)/Sæwine (Aa, Ba) - where die A of Æthelstan is the same obverse as die B of Sæwine – supplies eight coins. Seven of these are within the weight range 1.80 g–1.60 g (average 1.70 g), but the eighth coin, at 1.51 g, hints at an intermediate standard between those inferred from Ælfnoth's dies Aa. Æthelstan's dies Bc, with two coins weighing 1.45 g (average) may also be the foundlings of this standard, as may be the single coin of Æthelweard (Aa) at 1.54 g. At the lower standard there are seventeen coins ranging between 1.38 g and 1.24 g, with an average of 1.29 g. This leaves, as is observable with earlier types, a few coins at still lower weights. There are five of these ranging from 1.19 g to 0.96 g, but as they are all struck from uniquely represented die combinations no conclusion can be drawn on whether they reflect one or more further reductions in the standard.

On the material available, the following tentative conclusions may be drawn. At least three weight standards were in use in the Last Small Cross type, approximating to 1.70 g, 1.50 g and 1.30 g. These weights, if correctly deduced, are markedly higher than those applied in the Helmet type and represent a return to the levels seen in the Long Cross issue. The middle weight may have been of short duration since only four of the forty-two coins appear to have been struck to this standard, and none has (so far) come to light from Ælfnoth's die Aa, used at the two outer standards. The lightest known coin (Sæwine, Iq) at 0.96 g has a blundered reverse, reading SAEPNNE MON HVHET.

#### Last Small Cross type - Sources of dies

In 1958 Dolley, with his customary astuteness, used the coins in the Stockholm systematic collection, as catalogued by Hildebrand, to classify the busts of the Last Small Cross type.<sup>29</sup> He identified nine different styles issuing from seven different die-cutting centres, whilst voicing the possibility that 'a number of "Eastern" coins' could have been issued from London rather than

<sup>&</sup>lt;sup>29</sup> R.H.M. Dolley, Some Reflections on Hildebrand type A of Æthebred II, Antikvariski arkiv 9, (Lund. 1958). His work has been revised and refined by Stewart Lyon, 'Die-Cutting Styles in the Last Small Cross Issue of c.1009–17 and some Problematic East-Anglian Dies and Die-Links', BNJ 68 (1998), 21–41.

presumably Norwich or Thetford, where the style was otherwise most encountered. His main findings have been generally followed in subsequent studies of the Last Small Cross type. At the most mundane level it is not always easy to apply the classification to individual coins. Dolley himself gave Hild. 1377 (Æthelstan Aa) to the 'Northern A' style, but Hild.1393 (Sæwine Ba) to 'Southern B', although both coins were struck from the same obverse. More generally, the conclusion that, for example, the five moneyers he considered at Huntingdon drew their fourteen sets of dies from at least five different centres seems to call for scrutiny. Were the moneyers free to go where they wished for their dies? Presumably not, because otherwise they would all have used the nearest convenient die-cutting centre. If they were directed to particular centres, how was this determined? Was a moneyer's centre constant or did it change? And if it did, why and how was the change communicated? It all begins to appear unbelievably complicated.

Table 8 shows Dolley's allocation, by bust, of the Huntingdon coins in the systematic collection and the author's allocation of the larger number of dies in the present study. For comparison, Dolley's allocation of coins for the neighbouring mints to Huntingdon is also shown.

TABLE 8: Æthelred II, Last Small Cross type. Sources of dies at Huntingdon and neighbouring mints.

Mint	London	Northem A	Northern B	Southern A	Southern B	South Western	Western	South Eastern	Eastern (?)	uncertain
Huntingdon (Dolley)	3	4	ı		2	ı				2
(Eaglen)	5	7	1		5	(1)			(1)	
Bedford	2	2			1					
Cambridge	9	3	2		1				11	J
Northampton		11			1					į
Stamford	3	42	19							

In order to see how the arrangements may have affected individual moneyers, Table 9 shows each of the obverse dies used by the moneyers at Huntingdon, classified by bust style according to Dolley's study as refined and revised by Lyon, in 1999, set against the weight standards (as proposed above) at which each die was apparently brought into use.

TABLE 9: Æthelred II, Last Small Cross type. Huntingdon moneyers' sources of dies (obverse).

Moneyer	Early (1.70g)	Mid (1.50g)	<i>Late</i> (1.30g-)
Ælfget Ælfnoth	Winchester/ Exeter (1)	Lincoln (1)	London (1) Lincoln (3)
Æthelstan Æthelweard Leofric	Winchester (1) Winchester (1)	Lincoln (1)	Lincoln (1)
Manwine Sæwine	Winchester (2)		London (1) Lincoln (2) London (3)
A 11	Winghaston (5)	L'arrive (2)	Exeter (1) Norfolk (1)
All	Winchester (5)	Lincoln (2)	London (5) Lincoln (6) Other (2)

Number of dies shown in parentheses.

On this analysis the complexity of the arrangements begins to evaporate. At the outset all the dies so far coming to light were collected (or delivered) from Winchester, including the work of a die-cutter perhaps later associated with Exeter (Ælfnoth A), and in the middle period from Lincoln. Only in the late period, represented by thirteen of the twenty dies, is the picture more complicated, with London assuming equal importance with Lincoln as a provider, and apparently obverses cut at Exeter and a Norfolk centre being deployed. Of the moneyers only Sæwine appears to have used more than one die-cutting centre, during the latter part of the issue. Dolley's scenario is thus more credible than at first sight. It is certainly more convincing than the hypothesis that a group of die-cutters based, say, at London were engaged to cut dies predominantly, but not exclusively, for a given range of mints. It still leaves a puzzle as to why moneyers operating from or close to a recognised die centre should have drawn their dies from more distant places rather than their own doorsteps unless, for example, the resident die-cutter had become ill or died.

During the type the copulative ON begins to be used instead of MO(N). The change seems to be mainly associated with dies engraved at Winchester and Exeter used to strike heavy coins, with the old style MO(N) continuing to be used elsewhere, except for light/late coins where Lincoln obverses are combined with ON reverses of East Anglian style. The reverse dies linked to the Southern style bust (Winchester A) have the fullest mint designations: HVNTANDV and HVNTANDVN.

### Last Small Cross type - Die links

At the beginning of the issue Æthelstan (A) and Sæwine (B) struck coins from the same obverse and the latter appears to have retained the die to strike a coin at the intermediate weight standard (1.51 g). Sæwine, the most active moneyer later in the issue, also used an obverse (H) found combined with a reverse of Ælfwig of London and Brantinc of Sudbury. Obverse H is of 'Norfolk' style and the circumstances of its being shared may explain what is otherwise an unknown style of bust at Huntingdon in this type. Similar circumstances may also explain the use of an 'Exeter' style bust by Sæwine (G), although to date no die links to moneyers at other mints have been identified. A light coin (1.14 g) of the moneyer Ælfget of Huntingdon is known from a single coin dielinked to the London moneyer Godwine. These occurrences, allied to multiple sourcing of dies, may again point to disturbed times upsetting the normal pattern of activity at the mint.

#### Cnut (1016-1035)

Table 10 shows the number of coins by type known for the twenty moneyers recorded as operating at Huntingdon during the reign of Cnut. Two of them, Færthen and Thurcetel, bear Old Norse names.

#### Quatrefoil type – Impact of 'Cnut' hoard (c.1993)

The Quatrefoil type (*BMC* viii: Hild. E) provides the second largest sample of Huntingdon output by type with ninety-four coins from twelve moneyers. The number of coins has been swelled to almost double those previously recorded by examples appearing on the market in the UK and abroad from 1993 onwards. They have brought to light Æthelstan as a new moneyer for the type.<sup>30</sup> These newcomers are often in extremely fine condition and mostly bright from cleaning, although some appear to have been toned. They clearly share a common provenance. Acquaintances who have had the opportunity to inspect batches of the coins concur that the representation of mints points to a hoard assembled in the Cambridge area, possibly containing as many as 10,000 pieces. The majority are from the reign of Cnut, with a small proportion from the Last Small Cross type of Æthelred II. For want of better information, this paper refers to the coins as from the 'Cnut'

Mr. The Hårr hoard (1894), contained a cut half penny of Æthelstan, now in Berlin, reading JAN M/HVN, which has hitherto been attributed incorrectly to the moneyer Man. See catalogue of coins, no. 130 (3).

TABLE 10: Huntingdon moneyers under Cnut

		Number	of coins		
Moneyer	Æth. JI Last Small Cross	Quatrefoil	Pointed Helmet	Short Cross	Harold I/ Harthacnut
Leofric Æthelstan Sæwine Ælfnoth Æthelweard Eadnoth Færthen Godleof Godric Man [] Stanmær Thurcetel Wulfric Ada (Ælfsige) <sup>3</sup> Godman Leofwine <sup>b</sup> Wynsige Ælfgar Wulfstan	Yes Yes Yes Yes Yes	0 5 1 9 4 30 6 17 1 4 9 6 2	23 57 1 (?) <sup>3</sup> 1 4 1	15	(?)
Wulfwine	- Total	94	89	39	Yes Total
Number of moneyers O. dies R. dies R. dies ('equivalent'	-	12+ 42 51 77	8 24 25 29	4 9 8 9	20+ 75 84 115

<sup>&</sup>lt;sup>a</sup> Lockett 2761, not traced.

hoard (c.1993). Table 11 shows the impact of the hoard on the Huntingdon corpus in the Quatrefoil type.

The hoard, at a stroke, has redressed the preponderance of coins found in Scandinavia compared with 'others'. Moreover, this study certainly does not include all, or even most of, coins from the Huntingdon mint found in the hoard, but too little information is available on which to

TABLE 11: Cnut, Quatrefoil type. Contribution of coins from the 'Cnut' hoard (c.1993).

Number of coms	'Cnut' hoard		
and source	excluding	including	
Scandinavian	43 ~	43	
Other	7	51	
Total	50	94	
O.dies	31	42	
R. dies	35	51	
R. dies ('equivalent')	72	77	

b Or 'Steorwine'.

make even an inspired guess about how many may be missing.<sup>31</sup> Thanks to the hoard, the number of known reverse dies increases from thirty-five to fifty-one, and the calculation of 'equivalent' reverse dies from seventy-two to seventy-seven. This figure contrasts with Metcalf's estimation of forty.<sup>32</sup> It is also a marked increase upon the author's estimate for the Long Cross issue of forty-three 'equivalent' reverses, represented by 151 coins. It would be dangerous, nevertheless, to equate the difference with significantly higher levels of activity in the Quatrefoil type. During the Long Cross issue two moneyers, Ælfric and Osgut, used most of the dies, with a minor contribution from Eadwine, whereas in the Quatrefoil type there are twelve recorded moneyers of which half are only known from single die sets of one obverse with one or two reverses. It may be that these moneyers simply did not work their dies as hard as Ælfric and Osgut had done. Of the other six moneyers, Eadnoth with twelve known obverses was the most active, followed by Godleof.

### Quatrefoil type - Other features

No obverse die-links have so far been found between Huntingdon and other mints in the Quatrefoil type, nor of Huntingdon moneyers sharing an obverse. The pattern of obverse to reverse usage is less regular than in the preceding type, seven individual obverses being known with two reverses, and two with three reverses. There are four instances of two obverses being used with one reverse, although two of these involve a simple chain.<sup>33</sup> Overall forty-two obverses are known compared to fifty-one reverses, but the 'equivalent' die calculations imply that an estimated fourteen obverses remain to be discovered, compared with twenty-six reverses, giving a 3:4 overall ratio for the issue.

There are a number of coins from Huntingdon of unusual style, with blundered obverse legends. Blackburn and Lyon have identified these with an illiterate die engraver at Northampton rather than, as previously supposed, the work of Scandinavian imitators.<sup>34</sup> They are all of the moneyer Eadnoth. The reverses of two of these coins (Ec, Dh) are also used with conventional obverses (Bc, Kh), and an example of obverse B was in the 'Cnut' hoard, affording convincing evidence that Blackburn and Lyon are correct. Besides a third obverse of Northampton style reading ANGELI (Eadnoth C) there are two further Northampton style coins known from single specimens, one of which has the extraordinary obverse inscription +NVEBVTONAEO+N. The moneyer is rendered EDELRERD HVN on this coin and +ÆLPORD MO HVN on the other. Veronica Smart considers that both are attempted renderings of the name Æthelweard,<sup>35</sup> presumably from the same bungling craftsman's hand.

In the Quatrefoil issue there are five further features to be considered: namely weight standards, sources of dies, use of MO(N) and ON copulatives, symbols added to the obverse or reverse design, and abnormalities in the form of gouges in certain reverse dies. The question should also be raised whether any relationship is discernible between these features. This unavoidably entails taking into account certain of them (such as added symbols and gouges) before they have been explored in the text.

### Quatrefoil type - Weight standards

Quatrefoil pence were struck to markedly lower weight standards than pence of the preceding issue.<sup>36</sup> The heaviest coin in the study weighs 1.50 g and the lightest, as crisp as if it had just left the mint, 0.59 g. The moneyers Æthelstan, Ælfnoth and Æthelweard, all active in the preceding type, struck the heaviest coins, but, unexpectedly, their colleague Sæwine is only known from a

Eadnoth Bc, Ecij, Dgh, Kht.

35 Private correspondence. The coins are Æthelweard Dg and Ce.

<sup>&</sup>lt;sup>31</sup> A handlist of 1739 coins from the hoard, examined in 1994, contained twenty-two Huntingdon coins (ten Quatrefoil, nine Helmet, and three Short Cross types), but there is no way of knowing if this was representative of the hoard as a whole. If it was, it suggests over 100 coins of Huntingdon in all, compared with seventy-three in this study.

<sup>32</sup> See Table 1 above.

Mark Blackburn and Stewart Lyon, 'Regional die-production in Cnut's Quatrefoil issue', Anglo-Saxon Monetary History, edited by M.A.S. Blackburn (Leicester, 1986), pp. 222-72, at p. 240.

<sup>&</sup>lt;sup>36</sup> V.J. Butler, 'The Metrology of the Late Anglo-Saxon Penny: the Reigns of Æthelred II and Cnut', Anglo-Saxon Coins, edited by R.H.M. Dolley (London, 1961), pp. 195–214, at p. 214.

single coin weighing 0.85 g (Aa). Moreover, he is unknown in the following Pointed Helmet type. This peculiarity will be considered further below. The moneyer MAN could be an abbreviation for Manna,<sup>37</sup> or possibly for Manwine who is known from a light coin of the previous type.

Before assessing the relationship, if any, to weight standards of symbols added to the obverse or reverse design and gouging of reverses, the weight pattern will first be considered excluding coins displaying such features. Fifty-eight coins thus remain and reveal the pattern set out in Table 12.

TABLE 12: Cnut, Quatrefoil type. Weight standards.

Approximate	Ea	rly	Mid Late			
standard	1.45g	1.26g	1.06g	0.88g	Total	
Number of						
Coins	7	6	34	П	58	
O. dies	5	4	17	7	33	
R. dies	6	4	20	8 .	38	
O, dies as %						
of total	30	)	50	20	100	

The heaviest standard at Huntingdon does not appear to have been long maintained, and Eadnoth's only die used to strike a heavy coin is more widely represented by coins in the 1.14 g-1.00 g weight range. Half his activity seems to have occured at the 1.06 g standard, its separation from another group of coins at the low weight of 0.88 g being clearly apparent despite the small sample. Apart from two obverses used with one reverse, four obverses with two and one with three reverses, the normal coins are known from pairings of one obverse with one reverse.

Blackburn and Lyon have estimated the standards applied at five major mints in the Quatrefoil type.<sup>38</sup> Taking Lincoln as the comparator, the picture painted at Huntingdon by Table 13 is consistent, allowing for some variation between mints which must have been officially sanctioned rather than merely tolerated.

TABLE 13: Cnut, Quatrefoil type. Weight standards at Huntingdon and Lincoln.

Weight standards (g) (% of O. dies)

(40%)

(30%)

Huntingdon	Early 1.45 1.26 (30%)	Mid 1.06 (50%)	<i>Late</i> 0.88 (20%)
Lincoln	1.40 1.30	1.10	0.95

Coins featuring added symbols or gouges all fall within the middle and late weight standards, but whether they were struck at the same or different periods compared with normal coins of similar weights will be considered below.

1.20 (30%)

The highest weight at which each normal reverse die was used again enables a more sophisticated assessment to be made of the number of moneyers likely to have been in office at the same time than by considering their activity by type. The latter calculation gives a complement of at least four moneyers at the beginning of the type and three at the end. As Table 14 shows, four

Kenneth Jonsson and Gay Van der Meer, 'Mints and moneyers c,973-1066', Studies in Late Anglo-Saxon Coinage, edited by Kenneth Jonsson, Numismatiska Meddelanden xxxv (Stockholm, 1990), 47-136, at pp. 75 and 132.
 Blackburn and Lyon, 'Regional die-production', as in n. 34, p. 254.

moneyers were at work at each point of change in the weight standard, which has to be increased to five for whatever period Sæwine used his dies Aa, already referred to. It also shows Man and Stanmær operating at the 1.06 g standard. It may not be safely concluded, however, that they augmented the complement because two other moneyers (Æthelweard and Færthen) may have ceased operating during the lifetime of that standard and Man and Stanmær then could have replaced them, only to be succeeded in turn by Godric and Godleof.

TABLE 14: Cnut, Quatrefoil type. Complement of Huntingdon moneyers.

	Æth. II Last Small		Quatrefoi	l standard (g)		Helmei
Moneyer	Cross	1.45	1.26	1.06	0.88	
Ælfnoth	Yes	+	+			
Æthelweard	Yes	+4	O	+"		
Æthelstan	Yes	+	+	O	+	
Sæwine	Yes	o	+	o	+6	
Eadnoth		+*	4	+	+ :	Yes
Færthen			+	+		
Man				+		
Stanmær				+		
Godric				+.	0	Yes
Godleof				+d	*	Yes
Thurcetel					+	
Wulfric					+b	
Complement of moneyers		4-5	4-5	4-5	4-5	

<sup>\*</sup>Reverse a used with different obverses (AB) supplied from Thetford and Bedford respectively.

If coins with added symbols were taken as having been struck to the current standard, the moneyer Man should be added to the complement at the 1.26 g standard and Ælfnoth at the 1.06 g standard. Leofric has been altogether excluded from the reckoning because, although his coins are known from the Last Small Cross type of Æthelred II and Helmet type of Cnut, none has so far emerged of the two intervening types. A coin (Hild. 361), reading LEOFRIC M DVH and struck from Oxford-style dies, is almost certainly assignable to Buckingham.

#### Quatrefoil type - Sources of dies

As at the end of Æthelred II's reign, mints on the borderland between die-cutting centres, such as Huntingdon and Cambridge, seem to have had complicated die supply arrangements. Based on the definition of die-cutting styles made by Blackburn and Lyon, <sup>39</sup> Table 15 sets out the sources from which each moneyer received his regular obverse dies, plotted by weight standard, those with added symbols and/or gouging being indicated by parentheses.

The Table shows that Huntingdon moneyers took their dies from six different centres in the course of the issue: namely, Thetford, Lincoln, Northampton, Bedford, London and Stamford. Blackburn and Lyon suggest that the so-called 'Northampton' dies could equally have been produced at Huntingdon. This seems unlikely. Their analysis of the styles yielded from the Stockholm systematic collection and the Copenhagen sylloge eleven coins from Northampton of eponymous style, but only five (three by the author's reckoning) from Huntingdon. The sample of ninety-four coins in this study only increases the Huntingdon total from five to nine. But, more

на р. 240.

<sup>&</sup>lt;sup>b</sup> Abnormal die; position in issue uncertain.

Dies Aa used at 1.45 and 1.06 g standards.

<sup>&</sup>lt;sup>d</sup> Dies Aa used at 1.06 and 0.88 g standards.

<sup>&</sup>lt;sup>19</sup> pp. 226-46.

TABLE 15: Cnut, Quatrefoil type. Sources of standard and (other) dies with added symbols and/or gouges, plotted by weight.

Moneyer	1.45 g	<i>rly</i> 1,26 g	<i>Mid</i> 1.06 g	<i>Late</i> 0.88 g
Ælfnoth	Т	Т	(S)	8
Æthelweard Æthelstan Sæwine	T⁴ T <sup>v</sup>	$T^{b}$	B⁴ N	T (Li) (Lo)
Eadnoth	Li <sup>e</sup>	ΤN	Li T N Lo (Li) <sup>e</sup> (N) <sup>J</sup>	Lo (N) <sup>d</sup> (Lo)
Færthen Man		T B°	Li Lo <sup>e</sup>	(14) (120)
Godric Godleof			(Lo) <sup>r</sup> Li Lo	Lo
Stannær			Li Li/\$ (Li/\$)	(Li)(T)(Lo)
Thurcetel Wulfric				(S) (Lo) (Lo)
Number of die-cutting				_
centrés	2	3	6	5
Key: B = Bedford Li = Lincoln Lo = London		N = North $S = Stam$ $T = Thetf$	ford	
a = same reve b = same dies c = same obvo	(Aa)	e = same	obverse (D) reverse (a1) e a1 with gouge (a	(2)

importantly, the Northampton style employed over the two middle weight standards accounts for only five obverse dies compared with sixteen from other centres. Three of these were used by Eadnoth who also had recourse for his obverses to Thetford, Lincoln and London. It may legitimately be asked why he should have spurned an indigenous source for part of his requirements and why only Æthelweard amongst his six colleagues should have availed himself of it. The complexity of the overall arrangements is proportionate to the level of activity of each moneyer.

On the material available. Thetford and Lincoln were the initial source of dies for the Huntingdon moneyers, joined by Northampton and possibly Bedford when the standard was first lowered. At the second lowering Stamford and London came on stream, the latter predominating in the closing stages of the issue. The contribution of Bedford was insignificant and its independent existence as a die-cutting centre should not perhaps be treated as beyond doubt. Given that three centres (Bedford, Northampton and Stamford), were close to the mint and the main sources of obverses (Thetford, Lincoln and London) were more distant, convenience was clearly not the driving force in the supply of dies. The moneyers, therefore, were doubtless directed to obtain their dies from particular centres for reasons that are not immediately apparent. It at least implies a sophisticated system of control, also intimated by the use of added symbols and gouges shortly to be considered.

# Quatrefoil type - Use of MO and ON copulatives

On the evidence of known coins, reverses with the MO copulative, deployed in a variety of formats, make their final bow at Huntingdon. Lincoln, Stamford, Thetford and (the solitary) Bedford style obverses are all associated with this copulative, except for an exceedingly light coin of Godleof (Ei, Thetford style, 0.59 g, with a pellet added to the fourth quarter of the reverse).

Reverses bearing the ON copulative are also found on coins of Eadnoth (Ir, Lincoln style obverse) and Thurcetel (Aab, Stamford style obverse), but in each case the reverse is of London style.

Northampton and London style obverses present a more complex picture. One pair of Northampton dies uses a reverse lacking any copulative to strike a coin at 1.01 g (Æthelweard Dg). Another uses a MO reverse of London style to strike coins at 1.06 g and 1.05 g (Eadnoth Ej) and a third uses an ON reverse of London style to strike at 0.96 g (Eadnoth Dh). The heaviest known coins struck from London obverses weigh 1.05 g. One of these is found with a MO copulative (Eadnoth Hp) but another is used with two reverses lacking any copulative to strike coins ranging between 1.05 g and 1.00 g (Eadnoth Gmn). This raises the possibility that at London, at least, the MO copulative was abandoned during the currency of the 1.06 g standard and that briefly the copulative was omitted altogether before the introduction of ON. The author knows of no Northampton style reverses with an ON copulative to suggest a similar progression, but equally no Northampton reverses have been found to weigh less than 1.01 g.

The remaining coins struck from London obverses are associated with the ON copulative and weights below 1.05 g with three explicable exceptions. First, a coin of Eadnoth (Lu, 0.96 g) has a MO copulative but the reverse is of Stamford style. It also has two pellets (or a colon) in the fourth quarter of the reverse. Secondly, the only known Quatrefoil penny of Sæwine, weighing 0.85 g, also has a London obverse used with a MO copulative. This reverse is possibly of Lincoln (or Stamford) style and features a gouged out symbol resembling a dagger. Since Sæwine was active in the preceding Last Small Cross issue, and unknown in the Pointed Helmet type, a scarcity of his coins in the Quatrefoil type would be expected to be reflected by the survival of heavier coins rather than the light one here represented. Thirdly, a London obverse of Godleof with a sceptre engraved behind the bust (D) is used with a reverse enjoying a chequered history. It first appears in combination with a Lincoln obverse and bears the MO copulative and a small cross in the fourth quarter. In this state it is used to strike a coin at 0.90 g (Godleof Ce1). Later this reverse is used with the same obverse but the reverse cross gouged out, to strike a coin at 0.91 g (Ce2). The gouged reverse is also used with the London obverse described above (D) to strike a coin again at 0.91 g. The importance of Godleof dies Ce1/Ce2 is amplified below.

### Quatrefoil type - Added symbols

A distinction has to be drawn between unusual features simply resulting from the die-cutter's interpretation of the official design and those differences put in on purpose to signal an intentional deviation from the norm, whatever that might be. Admittedly, cases may arise when it is not possible to be sure into which category a particular feature should be placed, but that is no excuse for not attempting the exercise. For the purposes of the following analysis, coins with additional pellets, colons, trefoils and similar punctuation in the legends are not treated as deviant in the sense of having a special significance. One thing is certain. The difficulty in interpreting identifiable symbols proves that they were intended to be meaningful to the mint administrators rather than the coin user. These cryptic features normally consist of extraneous pellets, annulets or crosses placed conspicuously in the field of the design. They may be divided into those appearing on the obverse or reverse of a coin, or both. To them should be added the distinct category of gouges, appearing as bars on the reverses of a number of Huntingdon coins in this type, with corresponding shallow depressions on the obverses.<sup>41</sup>

Under Æthelred II, the use of pellets on the coins of the moneyer Osgut did not appear to be weight-related. In contrast, in the Quatrefoil issue no Huntingdon coins at the heavy/early weight standards have so far appeared with added symbols. They all occur on coins struck to the 1.06 g standard or below. The key question is whether this relationship is significant or merely coincidental.

Taking the obverses, only one (Godleof A1) is known where the die has been modified after being brought into use, by adding four pellets behind the bust (A2). Four coins are known in the original state (A1a) struck between 1.02 g and 1.00 g, but a fifth weighs 0.89 g, as do both coins

<sup>41</sup> The author is collaborating with Robert Grayburn in studying the use of gouges at other mints, particularly Stamford.

struck in the modified state with a different reverse (A2b). Another instance occurs where the moneyer Eadnoth used an obverse (D) with pellets either side of the bust at two weight levels: 1.11 g (Dg) and 0.96 g (Dh). The latter reverse is die-linked to two coins using a standard obverse (Kth) and weighing 0.96 g and 0.95 g respectively. Too much should not be read into the pellets in either case, the drop in weight probably representing the carrying-over of obverses from one weight standard into the next. One other obverse, of Stamford style, has a pellet in front and a cross behind the bust, and additional pellets on the reverse (Ælfnoth Dg). Here the reference to something unusual is unambiguous. The two examples are struck at 1.08 g and 1.01 g, the only coins of the moneyer known at that weight standard, who otherwise took his dies from Thetford, striking coins in the range of 1.50 g to 1.32 g (average 1.45 g). However, to claim this as an example of highlighting coins struck at below the current standard would not be justified on the evidence.

A further group of obverses can probably be consigned to the normal fold. These are dies with a single pellet behind London 'C' style busts: Eadnoth (M), Thurcetel (C, used with a gouged reverse), and Wulfric (A).

Turning to reverse symbols, two coins of Eadnoth (Ab) have pellets in annulets in the first and second quarters and pellets in the third and fourth. They weigh 1.03 g and 1.02 g compared with standard dies Aa used to strike one coin at 1.43 g, one at 1.14 g and two others at 1.04 g and 1.00 g. The relationship here between the standard heavy and light coins and light coins with added symbols is analogous to that already observed with the obverses of Godleof (A1/2) and Eadnoth (DK). More significantly, a coin of Æthelstan (Bc) with an early Lincoln obverse is used with a reverse with a cross in the fourth quarter to strike a coin at the late/light weight of 1.00 g. This at first sight could have weight implications, but other evidence to be considered below casts doubt on such an interpretation. Table 16 shows that the moneyers Stanmaer and Thurcetel provide further curiosities:

TABLE 16: Cnut, Quatrefoil type. Stammer and Thurcetel.

Die combi	ination	Reverse abnormality	Weight (g)
Stanmær	Вс	4 annulets	1.11
	d	none	1.09
	e	none	1.04
	f	4 pellets	0.94
	Сg	4 annulets	1.11
Thurcete!	A a	gouge 0.93	0.95
	Ь	I pellet and gouge	0.79

With the dearth of specimens from each die combination it is not possible to formulate a weight related interpretation of these markings.

From the foregoing it must be concluded that no persuasive case can be made for dies with conspicuous added symbols, such as pellets, annulets and crosses, indicating sanctioned weight manipulations within the Quatrefoil issue. The unique coins, Godleof (Ei) and Sæwine (Aa) defy satisfactory interpretation until further specimens emerge.

#### *Quatrefoil type – Gouges*

It remains to consider the more crudely executed gouges. Two points are clear. First of all, since coins from otherwise identical reverse dies exist with and without gouges (Godleof e1, e2; Man a1, a2) they were evidently added at the mint rather than the die-cutting centre. Figure 5 shows enlargements of Godleof's reverses e1 and e2.

Secondly, they are mutilations of the reverse die. They are invariably found in the same position on reverse die duplicates and show up as shallow depressions at different positions on the obverse, according to the die axis adopted by the hammer-man. In addition, gouges are known at



Fig. 5 Cnut, Quatrefoil type. Ungouged (e1) and gouged (e2) reverse of moneyer Godleof (×2)

Huntingdon placed in the second, third and fourth quarters of the reverse, but not, so far, the first. A reason, however, for the positioning of a gouge may exist beneath the gouge itself. The first clue is an ungouged reverse of Æthelstan (c) with a tiny cross in the fourth quarter. No gouged version of this reverse is known, but Godleof (e) provides examples of such a cross in a similar position, both with and without gouges, the gouging only partly obliterating the cross. There is no material difference in the weight at which these specimens were struck. They fall within the range 0.91 g to 0.88 g. This militates against interpreting Æthelstan's reverse as having weight implications. The abnormal coin of Sæwine (a), already referred to several times, also has a gouge, partly obliterating what appears to be a dagger-shaped symbol. Two reverses of Thurcetel likewise appear to be erasing a symbol, leaving a small pellet outside each gouge (a and e). In fact, only one possible example at Huntingdon has so far arisen of a gouge not used to erase something underneath. This is a die of Man (a1, a2) when, unusually, a small erasure appears to have been made at the outer edge of the coin, marring an otherwise normal legend. There is nothing from the examples known of Huntingdon to suggest that gouging to erase symbols underneath is in itself weight-related. Frustratingly, this leaves the reason for both as a mystery yet to be unravelled. It is conceivable that the gouges were made to remove symbols engraved on the dies for a particular reason, probably not connected with weight manipulation, that was no longer valid.

### Pointed Helmet type

The Pointed Helmet type (BMC xiv, Hild. G) yields eighty-nine coins, almost as many as for the Quatrefoil type, but from fewer moneyers and dies. This downward trend is even more marked in the following Short Cross type. Owing to the number of moneyers known only for the Quatrefoil or Pointed Helmet issues, a complement at Huntingdon no greater than three can be claimed at the beginning of the Pointed Helmet issue (Eadnoth, Godleof and Godric), with only one moneyer, Ada, definitely continuing to operate in Short Cross. He could be the same person who struck coins at Cambridge in the first two substantive issues of Cnut.<sup>42</sup> The twenty-five known Pointed Helmet reverse dies produce an 'equivalent' die estimate of twenty-nine. However, since five of the eight known moneyers (Ada, Godman, Godric, Leofric and Wynsige) are represented by solitary coins, the calculation may be an understatement even though Metcalf estimated twenty-seven reverses.<sup>43</sup> Almost seventy per cent of the known coins have a Scandinavian provenance. Amongst the others, the 'Cnut' hoard only contributes ten coins, although a handlist of 1739 coins from the hoard inspected in Australia records nine Pointed Helmet coins of Huntingdon.<sup>44</sup>

As in the previous type, the main moneyers were Eadnoth and Godleof. The former is only represented by two die-linked obverses (Aab, Bb), struck in the weight range 1.11 g to 1.01 g, so he may have ceased to operate early in the issue. Godleof, in contrast, struck coins over a wider range (1.13 g–0.81 g), employing fourteen obverses and seventeen reverses. His pattern of die usage is also complex, reminiscent of Eadnoth in the Quatrefoil type. He uses two obverses (D,E) with two

<sup>&</sup>lt;sup>42</sup> Jonsson and Van der Meer, 'Mints and moneyers', as in n. 37, pp. 59 and 123.

<sup>43</sup> See Table 1.

<sup>44</sup> Private correspondence.

reverses (i, j) but reverse i also in the combination Jsi. It may be that the leading moneyer had greater freedom at this period than his fellow moneyers in calling off and deploying the dies under his control. Godleof's die D is known in two states, the second flaunting a large, crude pellet in front of the bust. Seven coins struck from the die in its original state weigh between 1.06 g and 1.02 g, but the two from the pelleted obverse 1.13 g and 1.14 g respectively. Obverse die alteration at the mint here seems to be linked to striking coins at a higher weight than standard, in contrast with the altered obverse of Godleof (A1/A2) in the Quatrefoil issue.

## Pointed Helmet type - Weight standards

Godleof's die D demonstrates that the mint personnel had lost nothing of their skill in striking to fine limits of accuracy. This may be an important factor in interpreting weights in the Pointed Helmet issue because it is difficult to identify well defined weight standards from the available sample, particlarly towards the end of the issue. Instead of reducing the standards by clearly defined steps, the weight seems to drift downwards, possibly reflecting a complex gradual reduction in the standard. In marked contrast with the Quatrefoil issue, apart from Godleof's obverse D, the suspected harbingers of weight manipulation, in the form of added pellets and so forth, are conspicuously absent.

There are five coins struck at a weight above 1.10 g (average 1.13 g). These could be representative of an initial standard for the type, but could equally well signify strikings at the upper end of a lower initial standard. Looking at the output of the two main moneyers, Eadnoth struck twenty-two coins in the range from 1.11 g to 1.02 g, averaging 1.06 g. Grouping Godleof's output according to die-linked coins, he struck forty-four coins ranging from 1.14 g to 0.98 g at the average weight of 1.04 g. This may have been the standard in the early part of the issue, although it could also have been slightly higher at 1.06 g, with a second standard at around 0.98 g, by which time Eadnoth had ceased to operate. The five remaining intact coins of Godleof range from 0.92 g to 0.81 g, averaging 0.87 g and representing a distinctively lower standard. The coins of the six other moneyers all weigh below 1.00 g, as Table 17 shows.

TABLE 17: Cnut, Pointed Helmet type. Light coins.

Moneyer	Number of coins	(Average) Weight (g)
Ada	1	0.96
Godman	1	0.77
Godric	j	0.88
Leofric	1	0.92
Leofwine	4	0.86-0.76
		(0.81)
Wynsige	1	0.99

Considerably more coins would obviously be needed before attempting to estimate how many steps were involved in the reduction from 1.06 g (or 1.04 g) to coins in the region of 0.87 g or below.

### Pointed Helmet type – Bust styles and inscriptions

If the Huntingdon dies are divided into those used to strike to a 1.06 g standard ('early') and the remainder ('late'), the styles of bust, as identified by Dolley and Ingold, employed at those weight levels are as shown in Table 18.<sup>45</sup>

<sup>&</sup>lt;sup>45</sup> R.H.M. Dolley and J. Ingold, 'Some Thoughts on the Engraving of the Dies for the English Coinage c.1025', Commentationes de Nummis Saeculorum ix-xx in Suecia repertis, 1 (Stockholm, 1961), pp. 187-222 and Plates I-VI.

TABLE 18: Cnut, Pointed Helmet type. Distribution of obverse dies by bust style.

	Early		Late		
Bust	11a	111c	116	111b	111c
Moneyer					
Ada					ì
Eadnoth	1	1			
Godleof	1	4	3	1	5
Godman					1
Godric			1		
Leofric			1		
Leofwine			2		I,
Wynsige				1	
Total	2	5	7	2	8

The Table implies that at Huntingdon bust style IIa preceded IIb, and that IIIc preceded IIIb and spanned the weight reduction. This does not correspond with the tentative conclusions of Dolley and Ingold. A similar analysis of the available material does not reveal any time or weight related significance in the use of REX and RECX, solid or ornamented straps to the helmet, sceptres with heads of three or four pellets, or use of the ethnic A(NG), although at present the reading ANGL is only known from an early die (Eadnoth A). The mint inscriptions are unremarkable, reading HV with the addition of one or more of the letters VNTED, except on the coins of Godric (HVHDT) and Wynsige (VNTDNE).

## Short Cross type

A further contraction in the activity at Huntingdon mint is clear in the Short Cross type (*BMC* xvi, Hild. H). Thirty-nine coins are in the study, emanating from four moneyers, and nine obverse and eight reverse dies. Actuality is, however, less neat than the near 1:1 ratio in that Wynstan provides die-links Aab, Ba, and Wulfwine ABCa, Ce. The sample yields only nine 'equivalent' reverse dies. More than one moneyer in office at the same time cannot be claimed with any certainty. The pattern of waning activity at different mints through the main issues of Cnut is, however, variable. Metcalf's calculations for the mints closest to Huntingdon are set out in Table 19 with adjustments suggested for Huntingdon in this paper shown in parentheses.<sup>46</sup>

TABLE 19: Cnut. 'Equivalent' reverse dies at mints near to Huntingdon: Metcalf (Eaglen).

Mint	Quarrefoil	Pointed Helmet	Short Cross
Huntingdon	40 (77)	27 (29)	7 (9)
Bedford	37	19	6
Cambridge	150	18	6
Northampton	51	8	7
Stamford	123	85	101

Cambridge, and to a lesser extent Huntingdon, were particularly busy during the Quatrefoil issue, and Huntingdon appears to have declined less in the Pointed Helmet type than Cambridge, Bedford and Northampton. The most substantial mint at Stamford, on the other hand, shows

<sup>46</sup> D.M. Metcalf, 'Continuity and Change', BNJ 51 (1981), 82-3.

greater resilience on Metcalf's calculations, even increasing its die usage in the Short Cross issue. The 'Cnut' hoard contributes nineteen of the thirty-nine Huntingdon coins in the sample, resulting in the thirteen with a clear Scandinavian provenance being outnumbered. The hoard, however, only supplies one hitherto unknown die (Wulfwine g).

As Table 20 shows, the coins of Ada, Ælfgar (other than one coin of dies Bc) and Wulfstan were struck to a standard of approximately 1.12 g, but those of Wulfwine average 0.93 g. Not only were his coins lighter but he is the only moneyer whose coins are so far known in the following reign, illustrating that lightness is again equated with lateness in the Short Cross issue.

Moneyer	Dies	Average Weight (g)	Number of coins
Ada	Aa	1,13	11
	Bc	1.14	1
Ælfgar	Aa	1.11	7
6	Вс	1.00	1
Wulfstan	Aab, Ba	1,13	10
Wulfwine	ABCa, Cg	0.93	5

TABLE 20: Cnut, Short Cross type. Average weights by moneyer.

The inscriptions are again unremarkable, except for a grotesquely blundered obverse of Ælfgar (B), reading +[N]FII RCICI+N. The reverse spelling is also slightly botched but the bust is of good style. Only one die, Wulfwine (A), bears the ethnic abbreviated to A, and two of his three obverses read REX instead of RECX, which may be a late change.

## Harold I (joint king 1035–1037; sole, 1037–1040)

On the untimely death of Cnut, his only legitimate son, Harthacnut, was unable to leave Denmark to claim his inheritance owing to fears of a Norwegian invasion. Accordingly, his half-brother Harold was made regent, but Cnut's widow, Emma, was installed at Winchester to look after her son's interests during his absence. This led to coins of the first substantive Jewel Cross type (*BMC* i, Hild.A) being issued by southern mints in the name of Harthacnut and in the more northerly, including Huntingdon, in the name of Harold. Before the end of 1037, however, Harold had been recognised as sole king and Emma had taken refuge in Flanders. Harold himself died in 1040 when Harthacnut, by then at Bruges with his fleet, was contemplating invasion.<sup>47</sup>

Huntingdon is no exception to the scarcity of surviving coins of Harold's reign. This study contains only six coins of the Jewel Cross type and fourteen of the following Fleur-de-lis type (BMC v, vi, Hild. B). Wulfwine continued in office from the previous reign. Unless a coin of Harthacnut, to be discussed below, can be attributed to his erstwhile colleague, Wulfstan, no evidence exists of other Huntingdon moneyers at the beginning of Harold's reign. This may simply reflect the miniscule sample of survivors. It is improbable that Huntingdon had suddenly plummeted to single moneyer status, especially as Wulfwine was joined by Wulfwig in Harold's Fleur-de-lis type and both men struck coins of Harthacnut. In the Stockholm sylloge, however, both the PVLFPINE and PVLPI(I) readings in the Fleur-de-lis type are taken as referring to Wulfwine. But given the number of common Anglo-Saxon personal names ending in either -wig or -wine, it would be strange indeed if die engravers had used -wi endings to mean indiscriminately either -wig or -wine or to mean -wine alone. In the author's opinion, where several dies of both -wi(i) and -wine endings occur in the same coin type to discount the likelihood of isolated slipshod die-cutting, any -wi(i) endings may properly be expanded to -wig, leaving -wine endings freestanding.

There appears to have been more than one weight standard in operation, but the paucity of coins and ambiguity in the weights of different die combinations reduces any attempt to define standards into a cockshy.

<sup>&</sup>lt;sup>47</sup> F.M. Stenton, Anglo-Saxon England, 3rd edition (Oxford, 1971), pp. 419-22.

Table 21 shows the Huntingdon moneyers known to have struck the coinages of Harold I and Harthacnut.

TABLE 21: Huntingdon r	moneyers under	Harold 1	and Harthacnut.
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			Number of	coins		
	Cnut		rold I	Harti	hacnut	Ed the
1992	Short		MC)		MC)	Conf.
Moneyer	Cross	t	$v_{\tau} vi$	ii	xvii	(BMC)
Wulfwine	Yes	ĕ	6	4	0	(iv, i)
Wulfwig			8	1	0	(iv. i)
Ælfwine				2	4	(iii)
Wulfstan	Yes	0	0	O	1(?)	(i)
						Total
Total		6	14	7	2(?)	29(?)
Number of						
moneyers		Ĩ	2	3	2?	4
O. dies		3	5	3	2	13
R. dies		3	6	4	2	15
		<u> </u>	~			

'Equivalent R. dies = 21 (Metcalf 16)

### Harthacnut (joint king 1035–1037; sole, 1040–1042)

Because Huntingdon issued no coins of Harthacnut during his absence, his only coins belong to his brief sole rule between his arrival in England in June 1040 and his death, following a convulsion 'as he stood at his drink', barely two years later. Only nine coins are in this study, seven from the Arm and Sceptre type (*BMC* ii, Hild. B) and two from the same type with the obverse reading 'Cnut' (*BMC* xvii, Hild. I). The obverse design and size of lettering was well-suited to a monarch's name with four characters, but less so for one with eight. *BMC* ii obverse dies of the moneyers Ælfwine (A), Wulfwig (A) and Wulfwine (A) bear the king's name only, without his title or an ethnic. Even the name is abbreviated in two of the three readings. The *BMC* xvii obverses of Ælfwine (A) and Wulfstan (A), in contrast, both provide space for the title RECX by contracting the king's name to CNVT. This contraction could also have been thought to conjure up favourable resonances. Although Talvio has suggested that coins of *BMC* ii are heavier and thus earlier than *BMC* xvii, that distinction is not evident from the small sample of Huntingdon coins.

Two die combinations merit special mention. Wulfwine Aa was placed by Hildebrand under Langport, but Van der Meer in 1961 boldly stated 'the mint is Huntingdon'. This confidence is justified by the obverse die-link to a reverse (Ab) reading +PVLFPINE ON HVN. The other coin is that of Wulfstan of the Arm and Sceptre type inscribed 'Cnut' (Aa) in the Copenhagen Royal Collection. This is included without further comment under Huntingdon in the Copenhagen sylloge for Cnut. The attribution is difficult, however, because the reverse is struck off-centre with only the base of the letters of the mint name showing and these are susceptible to various interpretations. Wulfstan is confirmed as a Huntingdon moneyer in Cnut's Small Cross type and Edward the Confessor's Radiate-Small Cross type, with at least eight years separating them, and this coin would fall in the centre of that period. Although Wulfstan is not an uncommon name he is not

<sup>48</sup> The Anglo-Saxon Chronicle, as in n. 2, p. 162.

<sup>49</sup> Tuukka Talvio, SCBI Stockholm IV, p. 3.

<sup>&</sup>lt;sup>50</sup> G. Van der Meer, 'Some Corrections to and Comments on B.E. Hildebrand's Catalogue of the Anglo-Saxon Coins in the Swedish Royal Coin Cabinet', Anglo-Saxon Coins, edited by R.H.M. Dolley (London, 1961), pp. 169–87, at p. 181.
<sup>51</sup> SCBI Copenhagen, 1291.

listed under Harthacnut for any mint in Jonsson and Van de Meer's review of mints and moneyers (973-1066).<sup>52</sup> This inconclusive evidence is irksome because, if the coin is correctly attributed to Huntingdon, it would seem to follow that Wulfstan remained in office after Cnut's death through the reign of Harold I.

The 'equivalent' reverse die calculation for both reigns is twenty-one compared with twenty-three estimated by Metcalf. Coins from Scandinavian hoards again predominate.

### Edward the Confessor (1042–1066)

Table 22 shows the moneyers operating in each type at Huntingdon in the reign of Edward the Confessor. The assemblage of coins from the reign reveals some unusual features. Of the 101 coins in this study over a third are of the Hammer Cross type, including mules with the preceding and following issues. Of the remaining coins, each type is represented by between one and twelve examples. The Scandinavian hoards virtually cease to figure after the second, Radiate-Small Cross, type. Instead the extensive City of London or 'Walbrook' hoard of 1872 becomes a significant contributor to survival.<sup>53</sup> Although Thompson records no less than forty-one Huntingdon coins, matching them to the coins in the study is problematical. In fact, a total of only eight coins can be confidently attributed to the hoard, the origins of the remainder being largely unknown. This is clearly illustrated in the Hammer Cross type for which eleven coins of Godric are recorded and an unspecified number of Godwine, but none of the twenty-nine known coins of these two moneyers can be so attributed.

TABLE 22: Huntingdon moneyers under Edward the Confessor, by BMC type.

		Edward the Confessor number of coins									
	Ha`cnut	iv	i	iii	ii	ν	vii	ix	χί	xiii	Hd II
Wulfwig	Yes	6	3								
Wulfwine	Yes	2	3								
Ælfwine (Dunwig) <sup>3</sup>	Yes	0	0	12	7	4					
Wulfstan	(?)	0	2								
Unidentified				1							
Leofwine					(1?)			ł,	M 2		1
Ulfcetel					2					2M	
Godric						7	4	Ţ	10	2171	
Godwine						1	3	1 2	M 19	_6_	Yeş
											Total
								3	M	2M	
Т	otal	8	8	13	9	12	7	2	31	6	101
Number of											
moneyers		2+	2+ 5	2	2 2 2	2 5	2	3	3	2	8
O. dies		3	5	2 3 3	2	5	2 3 3	4	4	1	30
R. dies		6	4	3	2	4	3	2	3	2	29
R. dies ('equivalent	<b>'</b> )	•	20 (Meto	alf 12)		_		_	_	_	32
('equivalent	)		20 (Meto	aif (Z)		_		_	_	_	32

<sup>&</sup>lt;sup>a</sup> Recorded by Seaby (BNJ 30 (1955), at p. 141) but not traced. M = mule

<sup>52</sup> Jonsson and Van der Meer, 'Mints and moneyers', as in n. 37, 47-136. See Tables, pp. 54-119.

<sup>&</sup>lt;sup>53</sup> J.D.A. Thompson, *Inventory of English Coin Hoards, A.D. 600–1500* (Oxford, 1956), No. 255, pp. 92–9. R.H.M. Dolley and Mrs J.S. Strudwick, 'The Provenances of the Anglo-Saxon Coins Recorded in the Two Volumes of the British Museum Catalogue', *BNJ* 28 (1955), 26–59.

## The earlier types

In the initial PACX (BMC iv, Hild. D) type both Wulfwig and Wulfwine continue from the reign of Harthacnut. Wulfwig uses one obverse with three reverses, each carrying a pellet after the L of his name (Aabc). His other known set of dies (Bde) employs two reverses reading PSCX instead of the usual PACX. These are doubtless idiosyncracies of a die engraver and illustrate how reverse dies were prepared and issued together.

In the next, Radiate-Small Cross, type (BMC i, Hild. A) Wulfwig and Wulfwine are again at work and the separate identity of the two is placed beyond doubt by full PVLFPIG and PVLFPINE readings. Wulfstan also appears, raising again the currently unanswered question whether he had remained in office, but relatively inactive, from the end of Cnut's reign. In this type Seaby also recorded the moneyer Dunwig, but no coins or other references have been found to advance his claims to inclusion as a Huntingdon moneyer.<sup>54</sup>

In the Trefoil-Quadrilateral type (BMC iii, Hild. C) only the moneyer Ælfwine is known. As he is recorded for both of Harthacnut's types, it would not be surprising if coins struck by him came to light from the PACX and Radiate-Small Cross issues. His output is represented by four dies, in the combinations Aab and Ba. Reverse a has a pair of additional pellets in the inner circle and reverse b in the field. There is no weight-related explanation for the accretions, dies Aa weighing between 1.12 g and 1.10 g and Ab between 1.13 g and 1.10 g. The only intact coin of obverse B is barely heavier, at 1.16 g.

Ælfwine provides most examples of the Small Flan type (BMC ii, Hild. B) which maintained the weight levels of the previous two issues despite the reduced diameter of the coins. He is joined by Ulfcetel who is otherwise unknown at the mint, and only the fourth example of a name of Old Norse origin to have come to light at Huntingdon. Another candidate for inclusion in this type is Leofwine, but the mint reading is ambiguous and could refer equally to Hythe. A moneyer of that name was active at Huntingdon in Cnut's Helmet type and again when the Sovereign-Eagles type was being supplanted by the Hammer Cross type, but is otherwise unknown in the intervening period or at Hythe at any time.

### Expanding Cross type and weight considerations

In the Expanding Cross type (BMC v, Hild. E) it is well known that a dramatic change in the weight standard occurred, although the debate continues as to whether the heavy preceded the light, in the traditional fashion, or vice-versa.55 Although the number of Huntingdon coins known for the first four issues is too meagre to justify any attempt at weight analysis by type, the pattern of weights at Huntingdon throughout the period appears to be very similar. Twenty of the known intact coins weigh between 1.16 g and 1.05 g, with an average of 1.11 g. A further eight coins weigh between 1.00 g and 0.87 g, with an average of 0.94 g. Exceptionally, one intact Small Flan coin (Ulfcetel Aa(2)) weighs only 0.63 g. The number of dies and light coins struck from them is obviously too few at Huntingdon to reveal whether they represent a late lowering of the standard in each type, as had happened in earlier reigns. In the PACX issue the die set Aabc of Wulfwig, issued (as suggested above) together, were used to strike coins at both weight levels, as were his dies Aab, Ba in the Radiate-Small Cross type. A similar construction could be placed on Ælfwine's use of dies Aa in the Small Flan type. The conventional explanation would be that sporadic output caused both moneyers to keep their dies through changing weight periods, but, in theory at least, two separate weight standards could have been in concurrent use. This could account for the difficulty in resolving the question whether the light coins preceded or followed the heavy in the Expanding Cross type. This heretical thought would need to be tested (and possibly borne away in a tumbrel) at mints with greater numbers of moneyers and surviving coins than Huntingdon can provide.

<sup>&</sup>lt;sup>54</sup> Peter Seaby, 'The Sequence of Anglo-Saxon Coin Types, 1030–50', BNJ 28 (1955), 111–46, at p. 141.

<sup>55</sup> Sec. for example. Gareth Williams. 'A Hoard of "Expanding Cross" Pennies from Appledore'. N Circ (May 1998), 152–3, and Stewart Lyon. 'The "Expanding Cross" Type of Edward the Confessor – the Appledore (1997) Hoard'. N Circ (December 1998), 426–8.

At present, only two light Expanding Cross coins are known, of Ælfwine Ce, at 1.13 g with added pellets in the reverse field, and Godwine Aa, at 1.14 g. The remaining seven intact Huntingdon coins weigh between 1.78 g and 1.43 g, and average 1.64 g. They provide no helpful evidence on the possible sequence of light and heavy coins. Ælfwine is known for the Small Flan and not the Pointed Helmet type, but struck both light and heavy coins in the Expanding Cross issue. Godric is not recorded before the Expanding Cross type and his six known coins are all of the heavy issue, whereas Godwine, who also on current evidence began his career in the Expanding Cross type, is only known by a coin of the light issue.

With the introduction of the Pointed Helmet type (BMC vii, Hild. F) the two-tier weight standard, whether concurrent or sequential, appears to have been abandoned at Huntingdon. Instead, a standard of approximately 1.30 g seems to have been adopted and to have lasted until after the Hammer Cross type had appeared.

### Later types and mules

The Sovereign-Eagles type (BMC ix, Hild. H) is only represented by two coins, one each of Godric (1.35 g) and Godwine (1.34 g). Retrograde Ns figure on the reverses of both, possibly again reflecting the hand of a single craftsman. The importance of this issue, however, lies in its heralding two remarkable chains of mules at the mint. These involve three moneyers: Godric, Godwine and Leofwine, and three consecutive types: Sovereign-Eagles, Hammer Cross (BMC xi, Hild. G) and Facing Bust (BMC xiii, Hild. Ac). Figure 6 shows how the dies were deployed.

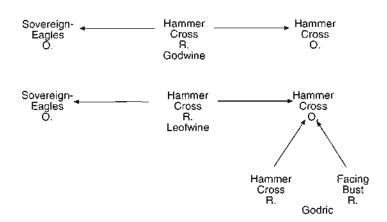


Fig. 6 Edward the Confessor. Mules at Huntingdon.

Thus both Godwine and Leofwine used a Hammer Cross reverse with Sovereign-Eagles and Hammer Cross obverses. The Hammer Cross obverse used by Leofwine was also used by Godric with both a Hammer Cross and Facing Bust reverse. Since the career of Godric apparently began before that of Leofwine and ended later, it may be that Leofwine operated in a dependent capacity to Godric, sharing his workshop, and was not issued with his own obverses. A coin of Godric struck from Leofwine's Sovereign-Eagles obverse would be needed to substantiate this hypothesis. The close-knit chains involving these three consecutive types must show that Huntingdon was passing through a period of low activity extending either side of the Hammer Cross issue. Ironically, such circumstances might be expected to produce the opposite of muling. Here, as so often in Anglo-Saxon numismatics, the seeds of research germinate into tantalising ambiguities.

The two recorded Hammer Cross pence of Leofwine conform with the 1.30 g standard but the well-represented output of Godric (Aa) and Godwine (Aa) cover a broad weight range of 1.53 g to 1.25 g and 1.44 g to 1.18 g, respectively. This phenomenon has been noted at other mints, particu-

larly in the eastern part of the country.<sup>56</sup> It is difficult to surmise what the standard might have been and why, especially as the coins struck from Facing Bust dies by Godwine return to the 1.11 g standard.

### Complement of moneyers

Turning to the complement of Huntingdon moneyers at work during the reign, the coins of Wulfstan and Leofwine leave doubts, as voiced above, except for the latter in the Sovereign-Eagles/Hammer Cross mule and Hammer Cross type proper. The moneyer Leofric has also to be expelled from the Hammer Cross type. Represented by *BMC* 564, the reverse was regrettably, if understandably, construed to read LIOFRIC, but is clearly a coin struck from Godric's dies Aa. Taking these observations into account, no watertight case can be made for more than two moneyers in any types except the transition between Sovereign-Eagles and Hammer Cross, when Godric, Godwine and Leofwine were intermittently at work. Freeman in his painstaking study of the moneyers and mints in the reign of the Confessor opines that

'the balance of the evidence might suggest (...) two phases of the mint's life under Edward the Confessor: as a two-or four-moneyer mint until the end of the Radiate/Small Cross type, and as a two-moneyer mint from Expanding Cross to a point in the middle of William I's reign.'57

Against this view, the Domesday Book states that TRE 'in this borough were three moneyers who paid forty shillings'.58 Domesday Book entries may be notoriously difficult to interpret or rely on, but the statement is unambiguous and should be the touchstone for any analysis of the complement. Freeman arrived at four moneyers in the first two types by counting in the dubious Dunwig and Wulfstan and at two by excluding them or having them replace Wulfwig and Wulfwine, who are known for both types. A more convincing scenario would be to picture Wulfwig and Wulfwine operating alone or alongside Ælfwine. For the next four types the surviving coins do not substantiate more than two moneyers. However, the existence of a second moneyer in the Expanding Cross and Pointed Helmet types depends upon a single coin of Godwine in the former type, a salutary reminder that one or two coins can have a disproportionate impact. After the clear activity of these moneyers in the transition between the Hammer Cross and Facing Bust issues, the material (if not the activity of the mint) suffers a decline and eventual eclipse, with no coins of the final Pyramid type (BMC xv. Hild I). Their absence may be due to the short period of issue, as suggested by Dolley,<sup>59</sup> but Freeman lists the type for fifty mints and there is evidence that the issue was more plentiful than is generally believed. 60 It would thus not be at all surprising for Huntingdon coins of this type eventually to emerge. In particular Godwine is known for the Facing Bust type and for the fleeting reign of Harold II and the name Godric for a Facing Bust reverse and the first type of William I. On the current evidence, therefore, there were three but at times possibly only two moneyers up to and including the Facing Bust issue. The evidence also points to fewer persons being engaged as moneyers and remaining longer in office, also a feature after the Conquest.

### The extent of known material

Freeman provides an invaluable starting point for any mint study in the Confessor's reign, with his tables of moneyers by type and the references he has traced for each monetype (i.e. the individual type(s) by which each moneyer is known).<sup>61</sup> After adjusting for duplicate recordings of the

<sup>56</sup> D.M. Metcalf, An Atlas of Anglo-Saxon and Norman Coin Finds, as in n. 24, p. 167.

<sup>&</sup>lt;sup>57</sup> Anthony Freeman, The Moneyer and the Mint in the reign of Edward the Confessor 1042–1066, BAR British Series 145, 2 vols (Oxford, 1985), p. 285.

<sup>58</sup> Domesday Book, fol. 203b.

<sup>59</sup> R.H.M. Dolley, 'The Stockbridge Down Find of Anglo-Saxon Coins', BNJ 28 (1956), 283-7, at pp. 284-5.

<sup>60</sup> Robin John Eaglen, 'The Mint of Bury St Edmunds to 1279', (unpublished doctoral thesis, University of London, 1989), pp. 57-8.

<sup>61</sup> Anthony Freeman, The Moneyer and the Mint, as in n. 57, passim.

same coin passing from one owner to another, Freeman lists eighty-six coins in his Huntingdon table, compared with one hundred in this study. The differences, however, are greater than the numbers imply because twenty-six coins cited by Freeman cannot be traced or verified and must therefore be catalogued purely as references. This may account for his inclusion of sixty-five 'recorded' coins of Huntingdon in his Appendix V. Forty-eight unverifiable coin references are listed in the catalogue appended to this study. It has to be remembered, of course, that Freeman was writing in 1985, and new coins and information are constantly coming to light.

# Links between Huntingdon and neighbouring mints

One of Freeman's most interesting (and potentially dangerous) contributions is to speculate on the extent to which moneyers may have moved from one mint to another; mainly to neighbouring centres, but sometimes further afield. A prima facie case can be made when a moneyer with an unusual name ceases to operate at a mint in a given type and his namesake then appears at a nearby mint in the same or next type. If the same obverse dies were used in both places, regardless of the rarity of the moneyer's name, that could be taken as conclusive. So far, however, no examples of this have been found at Huntingdon. Equally, the contemporaneous occurrence of a moneyer with an unusual name at neighbouring mints may also refer to the same person. Where the activity at one location is markedly greater than at another, it clearly reveals his home base. This phenomenon is exemplified by the brief appearance of Cniht, the Cambridge moneyer, at Huntingdon in the Helmet type of Æthelred II. Where, however, the name is common and no obverse die links exist, the rigours of scholarship require that the concurrent or sequential occurrence of moneyers of the same name at adjoining mints without other extraneous evidence should not merit more than factual noting. Indeed, the dangers of speculation are illustrated by the moneyer Leofric whom Freeman pictured travelling across Eastern England during the Hammer Cross type, coining at Huntingdon, Leicester and Norwich, and possibly Stamford. Without speaking for the other locations, Huntingdon can, for the reasons given above, definitely be removed from what Freeman describes as 'this extraordinary itinerary'. Table 23 shows conceivable relationships between moneyers at Huntingdon, Bedford, Cambridge, Northampton and Stamford in the Confessor's reign.

Freeman notes that both Wulfwig and Wulfwine 'cease work at Huntingdon in the Radiate/Small Cross type' (sic) and the name-forms immediately recur at Bedford and Cambridge.<sup>62</sup> However, he lists no Bedford coin of Wulfwig under the Trefoil-Quadrilateral type. Wulfwine represents a more plausible candidate, but given his activity at Huntingdon from the Short Cross type of Cnut and Freeman's belief that he could have ended his days at Bedford in the Facing Bust type, we are contemplating a career possibly spanning thirty-six years. Ælfwine presents greater difficulties. Although Freeman treats him as appearing briefly at Cambridge in the Long Cross heavy issue, Jacob has argued persuasively that the coin alluded to (BMC 473) is of the moneyer Ælfwig, not Ælfwine.<sup>63</sup> A connection between Leofwine at Huntingdon and a Stamford or Northampton moneyer of that name is recognised by Freeman as difficult to identify. The case for Ulfcetel, known at Bedford in the PACX, Small Flan and Helmet types, having worked briefly at Huntingdon is more credible. His proximity to Huntingdon allied to his unusual name are supporting arguments. Of Godric, Freeman states that 'the least fanciful proposition is that (he) (...) moved temporarily and briefly to Bedford'. 64 It would seem equally unfanciful that we are contemplating two persons. Freeman himself takes the view that Godwine (an equally common name) at Huntingdon was not the same person or persons who minted at Bedford, Cambridge and Stamford during part of his tenure. Although the argument for shared or transferred moneyers is not strong, other than in the case of Ulfcetel, it is nonetheless noteworthy that six of the eight Huntingdon moneyers in the Confessor's reign have namesakes at neighbouring mints.

<sup>64</sup> Freeman, The Moneyer and the Mint, as in n. 57, p. 287.

<sup>62</sup> p. 285.

<sup>63</sup> K.A. Jacob, 'The Mint of Cambridge', SCMB (February-March, 1984), 34-43, 72-6, at p. 73.

TABLE 23: Edward the Confessor. Occurrence of Huntingdon moneyers' names at neighbouring mints.

Moneyer		Type (BMC)							
DA TEST POST AND IN	ίν	4 <b>i</b>	iii	ii	v	vii	ix	$\chi i$	xiii
Wulfwig	Н	Н							
				В	В	В	В	В	
Wulfwine	H S	H							
	S			·S	S	S			
			C	C	C			C	
									В
Ælfwine	(H)	(H)	H	H	H				
	N	N	N	N	N	N	N	N	N
								(C)	
Wulfstan	(H)	H							
Leofwine							H	H	
	N	N			N S				
		(S)	S	S H B	S	(S)	S	S	S
Ulfcetel				Н					
	В			В	(B)	В			
Godric						B H	H	Н	H
	S	S			(S)				
							В		
Godwine						Н	Н	H	H
Victorial Angle	S	S		S	S	S	S	H S	
	~.	S C			-	H S C	B H S C B	(C)	C
		1983				\$270.	В	В	2.27

Key: H = Huntingdon
B = Bedford
C = Cambridge
N = Northampton
S = Stamford

# Possible hereditary relationships between Huntingdon moneyers

Another line of enquiry on the moneyers is to consider how far possibly related persons filled and succeeded to their role. Blood relationships could be indicated by a common first element (such as God-) or, less usually, a common second element (such as -wine). The same name could also be used to represent lineal descent but for obvious reasons normally missing out a generation. At the beginning of the Confessor's reign two moneyers were at work who could well have been related; Wulfwig and Wulfwine. Interestingly, they were joined or succeeded by Wulfstan and Ælfwine. Later Godric and Godwine operated together, and were possibly related to the earlier group by the -wine element. They in turn were joined by Leofwine. The only stranger in their midst is the Old Norse Ulfcetel. Perhaps he was indeed the third man who came, as Freeman suggests, from Bedford and whose office was later swept into the family circle by Leofwine. Linked names also occur under Æthelred II at Huntingdon where the odd men out were the Old Norse Osgut and the Cambridge moneyer, Cniht, and under Cnut where two of the four unlinked moneyers, Færthen and Thurcetel, also bear Old Norse names.

### Mint ranking of Huntingdon

In an attempt to estimate the relative importance of Bury St Edmunds as a mint in the reign of the Confessor, the author has used certain data set out in Freeman's tables. The statistics extracted were the number of coins recorded and the number of monetypes, namely the sum of the number of types in which each moneyer struck coins, from all seventy-six recorded mints. 66 From this

E.G. Withycombe, The Oxford Dictionary of English Christian Names. 3rd edition (Oxford, 1977), pp. xxiii–xxiv.
 Eaglen, 'The Mint of Bury St Edmunds', as in n. 60, pp. 71–4.

data Huntingdon appeared in the thirty-first position, rating as a lesser but not minor mint. Its position was only marginally lower than its neighbours, except for the important mint of Stamford, as Table 24 shows.

TABLE 24: Edward the Confessor. Ranking of Huntingdon and neighbouring mints.

Mint	Total Coins <sup>a</sup>	Total Monetypes <sup>b</sup>	Rank
Stamford	271	74	7
Cambridge	104	33	21
Bedford	85	30	24
Northampton	94	25	28
Huntingdon	65	22	31

<sup>&</sup>lt;sup>a</sup> The total coins are extracted from Freeman, 'Appendix V: Number of recorded coins by mints ('*The Moneyer and the Mint*', pp. 540–2). The Huntingdon figures have not been adjusted to take account of the present study.

Apart from any limitations arising from the raw data, the results obviously portray a composite picture for the reign and thus cloak any rise or fall in each mint's activity in the course of the reign.

### Harold II (1066)

The brief rule of Harold II has so far yielded three surviving coins of the PAX type (BMC ia, without a sceptre). All are from the same dies of the moneyer Godwine and of variety C under Pagan's classification.<sup>67</sup> As he was active in the Facing Bust issue of the Confessor it would, as already pointed out, be logical to expect coins in his name of the unrepresented Pyramid type to turn up some day. Although this coinage must have been introduced in haste, it is remarkable for the realistic quality of the king's bust. The three coins, at 1.38 g, 1.37 g and 1.30 g, were clearly all struck to the same weight standard.

### William I (1066-1087)

The reign of William I yields a scant harvest of Huntingdon coins, but not approaching the near famine of the following three reigns. The thirty-six coins shown in Table 25 provide nineteen obverse, twenty reverse and thirty 'equivalent' reverse dies, a manifest decline from the peak of seventy-seven in the Quatrefoil type of Cnut. The difference is obviously explained by the need to meet the onerous gelds in the earlier period, but other influences could also have been at work. In particular, there may have been an urban decline as the population felt less need to congregate for safety once the threat of repeated Viking raids was removed. East Anglia and the Eastern Midlands had suffered as much as any area from these incursions. The relative scarcity of silver, allied to coin circulating more freely, could also have led to a slackening of demand upon the lesser minting centres other than at the issue of a new type. This may be reflected in the tendency, seen towards the end of the Confessor's reign, for dies at Huntingdon either to be represented in considerable numbers or by very few examples.

<sup>&</sup>lt;sup>b</sup> The sum of the number of types for which the known moneyers are represented.

<sup>&</sup>lt;sup>67</sup> H.E. Pagan, 'The Coinage of Harold II', *Studies in Late Anglo-Saxon Coinage*, edited by Kenneth Jonsson, Numismatiska Meddelanden xxxv (Stockholm, 1990), 177–205, at p. 181.

TABLE 25: Huntingdon moneyers under William I, by BMC type.

						Willia number d					
Moneyer	EC	Hd II					Ā·				WII
	xiii	ia	i	ii	iii	$i\nu$	$\nu$	vi	vii	viti	i
			11	M							
Godric	M	0	3	4	2	5					
Godwine	Yes	Yes	0	3	1	5 4	1	2			
Thurgrim			1								
Ælfwine									2	6	0
Ælfric (?)										1(?)	
					-	-	-	_			
											Total
			11	M							
Total	-	=	4	7	3	9	1	2	2	7	36
Number of											
moneyers			3	2	2 2 2	2	1	1	1	2(?)	5
O. dies			4	2 6 7	2	2 2 3	1	1	1	2	19
R. dies			3	7	2	3	1	1	Î	2 2	20
R. dies ('equivale	ent')			=	-	===	=	<del>=</del>	-	-	19 20 30

M = Mule

It should be noted, in passing, that a mule exists of the moneyer Godric (Ba) between the Profile-Cross Fleury (BMC i) and Bonnet (BMC ii) types.

### Urban decline at Huntingdon

The evidence for urban decline at Huntingdon is shadowy, but perceptible. The thirty 'equivalent' reverse dies estimated for William I are comparable with thirty-two for the reign of the Confessor. Given the configuration of the surviving examples, both estimates may be somewhat conservative. The similar level of mint activity is consistent with the Domesday Book statement that in 1087 the town rendered £30, as it had done in 1066.<sup>68</sup> There were also, if somewhat implausibly, said to have been 256 burgesses at both dates. Despite this, there are clear signs of decline with 112 unoccupied messuages (*mansiones wastae*), eight of which are recorded as being occupied in 1066. Additionally, the residence of the bishop of Lincoln and twenty others had been cleared when William erected a new castle in 1068.<sup>69</sup> The drift of this evidence is that the decline had set in during the more settled times of Cnut and the Confessor and had virtually levelled out by 1066.

### Ranking of Huntingdon as a borough

The Domesday Book entry mentions two churches and a mill in the town but nothing of a market, although it is hard to believe one did not exist. As with the entry for Cambridge, there is a distinctly rural flavour to the description. The borough lands included 240 acres of arable and ten of pasture. There were also three fisherman who paid three shillings in dues. By several yardsticks, Huntingdon appears to have at least held its own, compared with its neighbouring mint towns. Table 26 shows Huntingdon so measured against Bedford, Cambridge, Northampton and Stamford at the end of the Conqueror's reign.

Stevenson's ranking of boroughs was based on the number of *mansiones* recorded in Domesday Book for each.<sup>70</sup> From the information provided for the Confessor's reign he placed Huntingdon

<sup>69</sup> Orderic Vitalis, The Ecclesiastical History, edited by M. Chibnall (Oxford, 1969). II, p. 218.

<sup>68</sup> Domesday Book, fol. 203b.

To Carl Stevenson, Borough and Town, a Study of Urban Origins in England (Cambridge, Massachusetts, 1933), p. 221. Appendix III.

TABLE 26: Ranking of Huntingdon and neighbouring boroughs, c. 1086 × 1090.

				Monetypes <sup>d</sup>		
Overall Ranking <sup>a</sup>	Borough	Estimated Population (`000) <sup>b</sup>	Stevenson Ranking <sup>e</sup>	BMC i–viii	Ranking	
8	Staniford	2.0-3.0+	10	17	15 =	
25	Huntingdon	<2.0+	?	10	29 =	
27	Cambridge	1.6+	13	8	33 =	
29	Northampton	1.5+	j 4	6	39 =	
33	Bedford	(1.5+)	?	8	33 =	

<sup>&</sup>lt;sup>a</sup> Based on population estimates, adjusted for other yardsticks.

<sup>d</sup> Calculated from listings published by Dr E. Harris (SCMB, 1983-7).

in tenth position. This arose from treating, amongst others, 100 smallholders (bordarii) on an equal footing with the burgesses. He did not show a figure for the end of William's reign, possibly taking it to be unchanged. But, using the more meaningful figure of 275 mansiones, Huntingdon would have ranked as inferior both to Cambridge and Northampton. As Table 26 shows, however, the population and monetype figures do not support so great a downgrading. Stevenson was unable to position Bedford because of the lack of information provided in Domesday Book. Darby, 'on grounds of analogy', has given it a population of about 1,500 persons, and this would indeed seem to be supported by other measurements.<sup>71</sup> The overall ranking of the towns in the left hand column of the Table is based on a synthesis of the yardsticks, taking population estimates as the starting point and the number of monetypes as an indicator of economic vigour. In doing so it would, of course, be a mistake to assume a simple linear relationship between mint activity and urban importance at this period. The analysis results in diminishing the status of each borough, other than Stamford, compared with Stevenson's ranking. It shows that, apart from Stamford, the towns were fairly similar in size and importance at the end of the Conqueror's reign, with perhaps Huntingdon taking a slight lead. Their status as county towns was assured, with, ironically, only Stamford being eclipsed by Lincoln, its mightier rival to the north.

### Domesday Book entries on the mint

Regrettably, the references to mints and moneyers in Domesday Book are not abundant, but two occur under the entry for Huntingdon, as follows:

The Borough of Huntingdon answered for the King's tax for a fourth part of Hurstingstone Hundred, for 50 hides. But it does not now pay tax in that Hundred, since King William placed a mint tax on the Borough.

In this Borough there were 3 moneyers who paid 40s, shared between the King and the Earl, but they are not there now.<sup>72</sup>

These entries have, as Carlyon-Britton recognised, to be read together.<sup>73</sup> In the reign of Edward the Confessor there were three moneyers, as is known to be so towards the end of his reign, but subsequently the king farmed the mint to the burgesses against a mint tax (*geldum monete*). Henceforth the moneyers became accountable to the burgesses and in the eyes of the Domesday Book compilers had, for fiscal purposes, ceased to exist. Carlyon-Britton suggests the farm was created after the execution of Earl Waltheof in 1076.<sup>74</sup> It would certainly have been simpler to

<sup>&</sup>lt;sup>b</sup> Based on estimates made by H.C. Darby, *The Domesday Geography of England*, 5 vols (Cambridge, 1952–71).

Based in Appendix III of C. Stephenson, Borough and Town (Massachusetts, 1933).

<sup>&</sup>lt;sup>71</sup> H.C. Darby, *Domesday England* (Cambridge, 1977), p. 307.

<sup>&</sup>lt;sup>72</sup> Domesday Book, fol. 203b, translated by John Morris as in n. 8.

P.W.P. Carlyon-Britton, 'A Numismatic History of the Reigns of William I and IΓ. BNJ 7 (1910). 1–25, at p. 2.

<sup>&</sup>lt;sup>74</sup> Carlyon-Britton gives the date as 1075.

eliminate the earl's entitlement to the third penny at a time when all his rights had escheated to the king. The concept of farming out minting rights was only practicable where the currency was no longer subject to frequent manipulation as it had been in the past. Weight adjustments would have been prompted either by fluctuating supplies of silver or as an act of policy. As such it was capable of being a fruitful source of income for the king. He stood to benefit in two further ways from control of the coinage: first, from the fees payable by those enjoying minting rights and, secondly, from a change in type (*renovatio*), itself probably linked to weight adjustment. The Huntingdon entry in Domesday Book shows that an unspecified fee was paid by the burgesses for their minting rights. Undoubtedly the burgesses, or possibly the moneyers themselves, would still have had to pay for individual dies, since their issue was by this period under the control of Otto the Goldsmith and his heirs. The comparison, the potential revenues from weight and type changes were far greater and William appears to have introduced major reforms to both sources.

Attempts had been made to stabilise the weight of coinage in the Confessor's reign, and this is reflected in the surviving coins from Huntingdon. Grierson has identified the obscure *monetagium* tax by analogy with continental practice as compensation for stabilising the currency at 22.5 gr (1.46 g), or slightly lower, from the sixth type of William I.<sup>76</sup> The main difficulty about this is, on Grierson's own reckoning, that the first five types had already been at a single standard of 21.5 gr (1.39 g). If this were so, does it mean that the king was effectively being compensated for increasing the weight of the coinage? This would have been a strangely circuitous means of arriving at the same end. Perhaps the impetus behind the tax, which Grierson considers to have had a brief lifespan, was a change in the other main but associated source of revenue, the *renovatio*.

Self-evidently recoinages continued after the Conquest, in the sense that the coin type changed periodically as in the past, but no studied attempt is made to differentiate each type by immediately recognisable design changes or alterations in the size of flans. The designs of the successive Bonnet (BMC ii) and Canopy (BMC iii) types, and of the Two Sceptres (BMC iv) and Two Stars (BMC v) type, and for that matter also the Sword (BMC vi) type, are superficially so similar that it is hard to believe they were meant to replace each other as legal tender. However, the king would still require any fiscal dues payable by tale to be made in the latest or even newly minted coin which had not lost bullion value through wear and tear. The type changes were sufficiently distinctive to enable the king's officers to confirm that this requirement was being fulfilled. The curtailment of revenue-raising opportunities, explicit in these changes, fades into insignificance compared with the untold wealth both in lands and intangible rights falling into the king's hands as the fruits of conquest. Placing the currency on a more rational footing, even if at a cost to the king, was easily affordable.

### Weight analysis

Insufficient coins of each moneyer, or even type, are known to enable a detailed analysis of weights to be made. The most variation, between 1.29 g and 1.01 g, is found in the first three issues of the reign (*BMC* i–iii). Greater consistency is evident in the next three types (*BMC* iv–vi) showing, with the exception of one coin at 1.10 g, a spread of 1.38 g to 1.28 g. The similarity of design between these types has already been noted. The last two types (Profile-Cross and Trefoils, *BMC* vii, and PAXS, *BMC* viii) are again consistent, with a spread of 1.45 g to 1.40 g. Although the sample is small, Grierson's view that a single lower weight standard applied in the first five issues of William I is not supported at Huntingdon.

# Complement of moneyers

Although Domesday Book tells us nothing of the complement of moneyers at Huntingdon after 1066, it does reveal that, at some stage, responsibility for them passed from the king's officials to

<sup>75</sup> George Cyril Brooke, A Catalogue of English Coins in the British Museum. The Norman Kings, 2 vols (London 1916), 1, p. exxxiii.

<sup>76</sup> Philip Grierson, 'Domesday Book, the Geld de moneta and monetagium, a Forgotten Minting Reform', BNJ 55 (1985), 84–94, at p. 91.

the burgesses. This change would not be expected to result in removal of the moneyers hitherto operating on behalf of the king, and there is no obvious sign of this happening. The scanty material available shows three moneyers in office in the first type, then two for the next three types and one for the final three types, when Godwine may have been succeeded by Ælfwine. On the evidence available it is only at this point that Ælfwine could be construed as the burgesses' replacement for Godwine. Since at least two moneyers were in operation at the mint in the early years of William II, however, the reduction to one may purely be a reflection of coin survival. Indeed, if a coin of Ælfric in St Petersburg is correctly attributable to Huntingdon, at least two moneyers were in office together in the PAXS type. It could still mean that the burgesses were entitled to less than three moneyers or in practice found it convenient to reduce the number they engaged.<sup>77</sup>

### Involvement of the earl of Huntingdon at the mint

Another insight provided by Domesday Book into the operation of the Huntingdon mint at this period is the reference, under the Confessor, to the forty shillings, or three marks in moneyer's dues, shared between the king and the earl of Huntingdon. Presumably, with the farming of the mint to the burgesses, under William the earl would have been deprived of his third penny, and his involvement with the mint severed. Had this not occurred a curious situation would have arisen, since from early in the twelfth century the kings of Scotland had pursued, largely successfully, their claimed entitlement to the earldom. Its early history is bound up with other geographical areas. In a charter datable to  $1050 \times 1052$ , Earl Siward of Northumbria was also addressed as earl of Huntingdon. On his death his son, Waltheof, was still a minor, and Edward the Confessor accordingly granted the earldoms of Northumbria, Northampton and Huntingdon to his brotherin-law Tostig. When Tostig withdrew into exile in 1065, he was succeeded by Waltheof who by then was of age. In 1070 Waltheof married William I's niece, Judith, but in 1076 he was executed for conspiracy. Judith then refused to marry Simon de St Liz, according to legend because he was lame, whereupon her daughter, Maud, was married to him instead and he was created earl of Huntingdon. Judith's influence in Huntingdon was not, however, extinguished. The Domesday Book records her as possessing the former residence of Earl Siward besides sixteen other houses, with full jurisdiction over them. When Simon de St Liz died, leaving an infant son, Maud married David, king of Scotland, whom Henry I created earl of Huntingdon. By also bearing a son to her second husband the seeds were sown for a dispute over the earldom lasting until Simon de St Liz III died without issue in 1184.78

### William II (1087-1100)

Table 27 shows the moneyers operating under William II. For the purposes of this paper the traditional attribution of the PAXS type to the end of the Conqueror's reign, rather than the beginning of that of William II, is observed. You With that caveat, only eight coins are known of two moneyers from Huntingdon in the reign. No examples have been found of the Cross Voided (BMC iii) or Cross Fleury and Piles (BMC v) types, but since the moneyer Siwate struck in both the Cross in Quatrefoil (BMC ii) and Cross Pattée and Fleury (BMC iv) types, he may be expected also to have coined in BMC iii. There are, moreover, unverifiable references to the moneyers Ælfwine and Godwine in that type. Doubt particularly surrounds Godwine who is otherwise unknown at Huntingdon after the sixth (Sword) type of William I. Ælfwine is known for the PAXS type and the second (Cross in Quatrefoil) type of William II, so his operation in the third (Cross Voided) type would not be surprising and in the first (Profile, BMC i) type may fairly be assumed. From this scant evidence a complement of two moneyers can be seen in the first two types, but no more then one (or none) for each of the remaining three. Lax workmanship allied to the poor condition

<sup>&</sup>lt;sup>77</sup> See W.C. Wells, 'The Pipe Rolls and Defaulta Monetariorum', NC<sup>5</sup>, 9 (1931), 261–90.

<sup>&</sup>lt;sup>78</sup> Victoria County History, I, pp. 4–7.

<sup>&</sup>lt;sup>79</sup> See D.M. Metcalf, 'Notes on the PAXS Type of William I', The Yorkshire Numismatist, 1 (Leeds, 1988), 13-26, pp. 13-14.

TABLE 27: Moneyers at Huntingdon under William II, by BMC type.

	WI		nı	William II unber of coi	ns	
Moneyer	viii	<i>†</i>	ii	tit	iv	≅ <b>v</b> ;
Ælfwine	Yes	0	2	?		
Siwate		2	2	0	2	
Godwine				?		
		===	-			Total
Total	2E	2	4	: :=	2	8
Number of						
moneyers		2	2	>=	1	2
O.dies		1	3		2	6
R. dies		i	3	/:=	2	6

of some of the coins, subverts any attempt to draw conclusions from their weights. The mint name is rendered as, or as a contraction of HVTED. This contrasts with William I's reign where the mint is represented by a wide range of variant readings. The convention of the die engravers to use two upright bars on occasion, both in the reigns of William I and II, to represent the letters A, H, N and V may lay the names of moneyers and mint towns open to ambiguity. But this foible is not considered to throw doubt on any of the coins listed without qualification in the catalogue as having a Huntingdon origin. The known dies are all in unlinked pairs, as in the last four issues of William I. This may reflect stricter control over the issue of dies to locally rather than royally managed moneyers.

## Henry I (1100-1135)

In common with other mints, the surviving coinage is insufficient to afford a reliable picture of coinage at Huntingdon during the reign of Henry I. Metal-detector finds in recent years have both increased knowledge and accentuated awareness of gaps. The reign has been one of the last bastions in the post-Conquest period to resist an accepted ordering of the coin types, with general agreement only on the relative position of eight from the total of fifteen. 80 In the following, these types will be referred to by their *BMC* numbering (i–xv).

The only extensive attempt to survey the coinage of Henry I is the deeply flawed work of Andrew, published in the *Numismatic Chronicle* for 1901.81 Under Huntingdon he assumes that the farm of the mint to the burgesses would have been automatically revoked after Simon de St Liz had been invested, no later than 1090, as earl of Huntingdon, following his marriage to Judith's daughter, Maud. The flaw in Andrew's argument is that the earl's rights to a third penny were dependent upon the king's rights to a full penny. It is inconceivable that the grant of the earl-dom as such should have had the effect of revoking a grant made by the king independently to the burgesses. Based on the hypothetical revocation and a further notion that minting rights to individuals fell into abeyance not only when the grantee died but also when he was absent from the country, Andrew deduced the years in Henry's reign when the mint could have been in operation. These were from 1100 to 1102/3, 1107/8 to 1109 and 1129 to 1130. Despite the lack of surviving coins, and any residual doubts about the sequence of types and uncertainty surrounding their dating, the recorded examples of Huntingdon coins types (*BMC* i, ii, iii, x, xiii, and xiv) are sufficient to disprove Andrew's reasoning. They are set out in Table 28. The last three known types would all

<sup>80</sup> See Brooke. The Norman Kings, as in n. 75. I. pp. liii, Ixvi-Ixvii, Ixix and cliv-clv: Michael Dolley. The Norman Conquest and the English Coinage (London, 1966), pp. 21-8; M. Archibald. 'Coins'. English Romanesque Art 1066-1200, Hayward Gallery (London, 1986), pp. 329-33; Peter Seaby, 'Henry I Coin Types: Design Characteristics and Chronology'. The Yorkshire Numismatist. I. 27-43. The author understands that a forthcoming sylloge of the coins of Henry I provides convincing support for the sequence of types proposed by Blackburn in 'Coinage and Currency under Henry I: A Review'. Anglo-Norman Studies 13 (Woodbridge, 1990).

<sup>81</sup> W.J. Andrew, 'A Numismatic History of the Reign of Henry I'. NC4 (1901). 1–515.

TABLE 28: Huntingdon moneyers under Henry I, by BMC type.

Moneyer	Henry I number of coins WII										ST						
moneyer	iv	İ	ii	iii	iv	ν	vi	vii	viii	ix	X	χί	xii	xiii	xiv		i
Siwate Godric (Sefwine)	Yes	1?	1 (1?)														
Ælfwine Godwine Derlig				l							2 1			2	2		
																Total	
Total Number of		1?	1+	1							3			2	6	13-15	
moneyers O. dies R. dies		1? 1 1	1-2 2 2	l l 1							2 2 2			1 1 1	2 3 3	5-6 10 10	

have been struck after David of Scotland had assumed the earldom in 1113 and, on Andrew's own reckoning, only in 1129–30 was he in England more than fleetingly.

Fifteen coins are in the study, compared with three known to Andrew. These yield five or six types and moneyers and assemble into a very skeletal framework. No continuity of moneyers from previous reigns can be advanced with any confidence, the gap involving Godric and Godwine being too great to be credible. Ælfwine presents a more complex problem. Recorded for the penultimate type of William I, the second and possibly third type of William II and then from types iii, x, xiii and xiv of Henry I, the name seems unlikely to represent the career of one man. But, if not, the break resulting in his namesake taking office could plausibly have occurred at various points in a span exceeding, on the evidence of known coins, four decades. A complement of more than one moneyer cannot be claimed at Huntingdon at any time in the reign, although two moneyers are recorded for types x, xiv and, possibly, ii. If Ælfwine's career were shown to span the reigns of William II and Henry I, a complement of not less than two moneyers would be established.

So far, no coins have appeared of Henry I's last type (BMC xv) or with certainty of the first substantive issue of Stephen. This lends support to Blackburn's view that Huntingdon was one of up to twenty-eight centres which lost their minting rights following the purge of moneyers at Christmas 1124.<sup>82</sup> The closure of the Huntingdon mint would have been straightforward for the king if the farm to the burgesses, set up under William I, still obtained, rather than his having to deal with the rights of David, king of Scotland, as earl of Huntingdon.

The meagre representation by type, the distressed state of some of the known coins and the divergent weights of the remainder dispel any temptation to consider the weight standard(s) at Huntingdon during the reign. As under William II, the dies so far coming to light were used in unlinked pairs.

Harris's tables of the moneyers of the Norman kings and the types they are known to have struck provide interesting statistics for Huntingdon and its neighbouring mints in the reign of Henry I.<sup>83</sup> Table 29 shows the number of moneyers and monetypes recorded. For all the limitations of this exercise, the figures show a remarkable surge by Northampton and the lingering terminal decline of the Cambridge mint, for which only one coin has so far come to light from the next reign. The increased importance of Northampton doubtless provided the foundation for its survival as a mint long after the other five had closed.

<sup>82</sup> Blackburn, 'Coinage and Currency under Henry I', as in n. 80, p. 70, Table 6.

<sup>83</sup> E.J. Harris, 'The Moneyers of the Norman Kings and the Types they are Known to have Struck', SCMB (January 1983), 11; (June 1983), 149-50; (December 1984), 315-16; (January-February 1986), 9 and (April, 1987), 88-9.

TABLE 29: Henry I. Activity at Huntingdon and neighbouring mints, based on Harris' listings.

	Num	ber of
Mint	Moneyers	Monetypes
Bedford	3	5
Cambridge	1	1
Huntingdon <sup>a</sup>	3	4
Northampton	10	18
Stamford	7	15

<sup>&</sup>lt;sup>a</sup> The catalogue of coins in this study includes five or six moneyers and between seven and nine monetypes.

### Stephen (1035–1054)

At his uncle's death, when Stephen opportunistically seized the throne, David, king of Scotland was earl of both Northampton and Huntingdon. David supported the rival cause of his maternal niece, the Empress Matilda. Stephen was thus keen to secure an understanding with David and in 1136, under the Treaty of Durham, confirmed the earldom of Huntingdon upon David's son, Henry. According to Davis, soon after 1136 the neighbouring earldom of Northampton was conferred on Simon de St Liz II who, apart from his lineal claims to both earldoms, was a steadfast follower of Stephen. Simon also may have succeeded to the earldom of Huntingdon in 1141 and continued to hold it until his death in 1153.84 At that time, his son being under age, the Scottish faction was restored, in the person of King Malcolm. It thus appears that for most of Stephen's reign Huntingdon was either in hands loyal to the king or at least not antagonistic towards him at a local level.

No mention is made of Huntingdon in the accounts of the ferocious rebellion mounted in 1143 by Geoffrey de Mandeville, earl of Essex, from his base at Fordham in Cambridgeshire. Ramsey Abbey, barely ten miles from Huntingdon, was seized and fortified and Cambridge sacked and burnt. 85 Presumably Simon's castle at Huntingdon acted as a sufficient deterrent. Nevertheless, the prosperity of the town was not immune from the effects of the hapless reign, its taxable value plummeting by one half between 1135 and 1144.86

The economic facts contrast with Henry of Huntingdon's idyllic description of Huntingdon at about that time:

'It is remarkable ... for its sunny aspect as well as for its beauty, besides its contiguity to the Fens and the abundance in wild fowl and animals of chase.'87

Its semi-rural mien is reflected here as in Domesday Book.

Table 30 shows the moneyers and types known for the reign. Of Stephen's substantive issues (BMC i, ii, vi and vii) only the Awbridge type (BMC vii) is certainly known from Huntingdon. In the Watford type (BMC i) there is a coin reading +GOIMER: ON[]N, which could be an early striking of the moneyer Godmer, but a die duplicate with a clearer reading would be needed to be sure. In the Profile-Cross and Piles type (BMC vi) there is also a coin from the Wicklewood hoard of 1989 (see catalogue of coins (324)) which could also be a Huntingdon emission. The Awbridge type is represented by three coins of Godmer, struck from two pairs of dies, and two (or three) coins of Waltier, struck from one (or two) pairs of dies. Waltier is also known from two coins struck from the same dies in the Cross and Fleury type (BMC iii), thought to be a local rather than

<sup>83</sup> R.H.C. Davis, King Stephen (London, 1967), pp. 134–5. Details of the tenure of these earldoms during Stephen's reign are not certain.

x5 Victoria County History, 1, p. 5.

<sup>86</sup> H.W.C. Davis, 'The Anarchy of Stephen's Reign', English Historical Review, 18 (1903), 630-41, at pp. 634-5

<sup>87</sup> Henrici Archidiaconi Huntenduniensis Historia Anglorum, edited by Thomas Arnold, Rolls Series (London, 1879), p. 178,

TABLE 30: Huntingdon moneyers under Stephen, by BMC type.

	Henry I		٨	ns		
	xiv	i–ii	iii	iv	vi	vii
Godmer Waltier	Yes	?	2			3 2
uncertain (Derlig)					?	?
Total			2			5
Number of moneyers O. dies R. dies			1 1 1			2 3 3

substantive issue. Mack dates it to between 1143 and 1152.88 Blackburn has perceptively identified this type with Simon de St Liz II becoming earl of Huntingdon. 89 It may also have signalled the reopening of the mint, but this must be less certain. Although Waltier appears to have been in office from the Cross and Fleury type through to the last (Awbridge) type, clear evidence is lacking whether he operated alongside or was succeeded by Godmer. If the coin reading GOIMER is correctly attributed to Huntingdon, the mint clearly enjoyed at least two-moneyer status for most of Stephen's reign.

The scarcity of Huntingdon coins for the reign applies equally to the neighbouring mints. Apart from Cambridge, for which no coins are listed, Table 31 shows the moneyers and monetypes for the other mints, taken from Harris's tables.90

TABLE 31: Stephen. Activity of Huntingdon and neighbouring mints, based on Harris' listings.

	Num	ber of
Mint	Moneyers	Monetypes
Bedford	3	5
Cambridge	_	_
Huntingdon	2	2 <sup>a</sup>
Northampton	1	3
Stamford	3	3

<sup>&</sup>lt;sup>a</sup> The catalogue of coins in this study includes three monetypes.

With the introduction of the Tealby or Cross and Crosslets type of Henry II in 1158, Huntingdon ceased its minting activities, together with at least thirty-three other centres, as part of a deliberate policy to reduce the number of mints.<sup>91</sup> The casualties included a number of middleranking boroughs, such as the county towns of Nottingham, Warwick and Worcester. The number also included Stamford, surprisingly, bearing in mind its earlier importance as a mint. Bedford and Northampton both survived, the former briefly but the latter continuing until the early years of Henry III's Long Cross coinage introduced in 1247.<sup>92</sup>

<sup>88</sup> R.P. Mack, 'Stephen and the Anarchy', BNJ 35 (1966), 38-112, at p. 50.

<sup>89</sup> Mark Blackburn, 'Coinage and Currency', The Anarchy of King Stephen, edited by Edmund King (Oxford, 1994), pp. 145-209,

at p. 181.

90 See footnote 83 above. A local variant of BMC i at Cambridge has come to light since Harris's listings were completed. See Blackburn, 'Coinage and Currency', as in n. 89, p. 181 and footnote 85.

<sup>91</sup> J.J. North, English Hammered Coinage, I, 3rd edition (London, 1994), pp. 204-6, 218.

<sup>&</sup>lt;sup>92</sup> L.A. Lawrence, 'The Long Cross Coinage of Henry III and Edward I'. BNJ 11 (1915), 101-19, at pp. 109-10.

#### THE CATALOGUE OF COINS

#### **Explanatory Notes**

The catalogue was finalised in January 2000 and makes no pretence to be a complete record of the known coins of Huntingdon at that date. Such an aspiration would be inimical to publication at all. Nevertheless, the main likely sources of material have, as far as practicable, been tapped, with two caveats. The author visited Stockholm in 1978 to study their unpublished hoard material. Coins discovered since that date have been identified from the computer lists at Stockholm. Because these are still incomplete, as well as being constantly added to, Eva Wiséhn has kindly identified some of the omitted coins, but others have undoubtedly eluded the trawl. The second caveat relates to the 'Cnut' hoard of c.1993, discussed in the text. Huntingdon coins from this hoard continue to appear and are likely to do so unquantifiably into the forseeable future.

No coin has been included in the catalogue unless the author possesses it or has adequate photographic or other illustrations to enable the dies to be identified and to ensure that it is not recorded more than once. Descriptions of coins for which no concrete image could be found are recorded under 'Other references'.

Catalogue numbers have been given to each die combination identified. When the attribution to Huntingdon of a moneyer is uncertain, the numbers given to the relevant die pairings are shown in parentheses. Such coins are illustrated in the plates to help resolve the uncertainty if further relevant coins come to light. Where, in the author's opinion, a die pairing is doubtfully attributable to Huntingdon, no catalogue numbers are given and the moneyer's name is placed in parentheses. These die pairings are likewise illustrated. Where, in the author's opinion, the Huntingdon origin of a coin should be rejected, details are given under 'Other references' and the coin is not illustrated.

The obverse (O.) and reverse (R.) readings are represented as closely as the limitations of type-setting permit. In particular, variations in the apostrophes in MO(N), the ligulation of OX in ANGLOX, the shape of Ss and distinction between barred and unbarred As are not shown. Illegible or obscure portions of the legends are shown within brackets by a blank or putative letters. Special features of an obverse or reverse die are described immediately below the transcription of the legend, together with pointers to die identification where this may be helpful.

Each coin struck from the same pair of dies is given an arabic number in parentheses. The coin chosen to illustrate that die combination in the plates is marked by an asterisk. The illustrations have been chosen for their capability to show the salient features of the dies rather than to publish previously unillustrated coins.

The initial reference for each coin states the most recently known owner or documentary reference. This is followed, when known, by the hoard or find and date of discovery of the coin. The ownership pedigree and any illustrations are then briefly referenced. When, however, a coin is published in an accessible source, the pedigree is only given to the extent needed to guard the reader against mistaking such references for evidence of separate coins.

The die axis (in degrees) and weight (in grams) is given for each coin, where known. The author has not in many instances been able to verify this information, and certain of the irregular die axes are clearly suspect. When they occur amongst a number of die duplicates of regular axis, the readers will be able to draw their own conclusions.

Where a coin has been cut into fractions, or is obviously damaged, corroded or worn, the weight is shown within brackets and all such coins have been excluded from any weight analysis.

```
EADWIG (955-959)
                           Three Line Horizontal type (BMC ii, HT3 (see CTCE, p. 148))
                           Dunne
                  O.
                            +EADVVIG RE+
(1)
        Aa
                  R
                                 DVN
                               11+A+H+
                                IICM'O
                  (1)* Lyon collection. The mint signature in the middle line appears
                  to be inverted, the V reading as A. Fragment. 180°
                                                                                                       [1.20]
(2)
        Bc
                  O.
                           +EADVVIG RE+:
                  R
                                 ...
                                DVN
                              +HV+N+
                                NCMō
```

92			THE MINT OF HUNTINGDON	
		(1)*	SCBI British Museum 811 (BMC 12, Plate XII,11). Ex Tyssen. Ruding, Plate 20, no. 5. In CTCE, p. 149, the coins of Dunne are 'tentatively attributed to Huntingdon', but in SCBI this coin is given to Huntingdon without qualification. Chipped. 180°	[1.03]
(3)	Ce	O.	+EADVV[ ]E+	
		R.	.: DVN[ ]	
			+HV+H+	
			 ∴	
		(1)*	SCBI British Museum 812. Ex Lawrence 15 (?), Armitage bequest, 1956. Fragment. 90°	[0.82]
			Other references: Mints, Dies and Currency, edited by R.A.G.	
			Carson (London, 1971), p. 98 records a fragment owned by the Society of Antiquaries and now missing, transcribed by Blunt in his card index as reading/DVN/+HV+N[]/NC[]/	
			Hildulf	
(4)	Aa	Q.	+EADVVIG REX ∴	
		R.	∴ HìLDV.	
			+N.VH.	
			LF MŌ ∵	
		(1)*	Fitzwilliam Museum, Cambridge. Ex Carlyon-Britton, Wells and	
			Blunt, Like Dunne, the moneyer is 'tentatively attributed to Huntingdon' in CTCE, p. 149. 270°	1.12
			(Wineman)	
(5)	Aa	O. R.	+EADVVIG RE+	
		K.	:. PINEM	
			+HVN+ VIIMO	
			· ·	
		(1)*	SCBI British Museum 809. Chester hoard (1950), 288. Because	
			of other coins of Wineman reading HAH, this and the next coin (Ba) has been attributed to 'Hampton' in CTCE, p. 149 and	
			'Hampton (Northampton)' in SCBI. The reverse appears to have one or both of the A's upside down. 0°	1.19
(5A)	Ва	O.	+EADVVIE RE	
		R.	As above	
		(1)*	Grosvenor Museum, Chester Chester hoard (1950), 289.0°	1.3[-]
			(Dudeman)	
(-)	Aa	O.	+EADVVIQ RE+	
		R.	DVDEWVN O HA+H+ (division of reading unknown).	
		(1)	Carlyon-Britton 1009. Not illustrated or traced. The MA of DVDEMAN appears to have been inverted, increasing the	
			ambiguity of the mint name HAH (or HVH?)°	[0.96]

Other references: Wells (BNJ 19 (1927–8), p. 85) refers, possibly erroneously, to another example in the British Museum, which has not been found.

#### EADGAR (959 (Mercia from 957)-975)

Two Line type (BMC ib; HP1)

No coins

Other references: Grantley 1089, reading 'HILDVLFHV' and described as cracked; Grantley 1087, reading 'INGOLFHV' and described as broken in half. These readings are not considered to allude to a mint location.

#### Circumscription Cross type (BMC iii)

Æthelsige

(6) Aa O. +EADGAR REX HTNVH+
R. +ÆÐELZGE MO+HVNTM:
N in inner circle.

(1)\* SCBI British Museum 1087. Ex Grantley 1103. Described in SCBI as 'of no identifiable mint'. Blunt considered it was from a South-Western source (England before the Conquest, edited by Peter Clemoes and Kathleen Hughes (Cambridge, 1971), p. 187). See also CTCE, p. 175. 180°

1.39

Beorhtferth

(7) Aa O. +EADGAR REX ANGLOV+ R. +BRREHTFERDN MO:HN

(1)\* SCBI British Museum 1088. Chester hoard (1950), 452. Again assigned a South-Western origin in England before the Conquest, p. 189 and CTCE, p. 175. Corroded, 90°

[1.37]

Borlitnoth

(8) Aa O. +EADGAR REX NTAHVN+
R. +BORHTNOÐ MÖ+NVHTH+

(1)\* National Museum of Ireland, Dublin. Smarmore. County Louth hoard (1929). Similarly assigned a South-Western origin. 270°

1.33

Hardbrit

(9) Aa O. +EADGAR REX ANG[L]ORX R. +HARDBRIT MO[N]ETA H

(1)\* Found at Irthlingborough, Northants (1985), see *BNJ* 55, p. 64 no. 33, illustrated, with the comment that Huntingdon or Northampton was the most likely mint, although certain features were associated with a Southern die-cutting centre. In *CTCE*, p. 183, it is assigned to Northampton. 210°

[1.09]

Bust Crowned type (BMC V)

Duding

(10) Aa O, +EADGAR REX+ R. +DVDING MONETA·VN

		(1)*	Fitzwilliam Museum, Cambridge. Lough Lane, County Neath hoard (1843). Ex Sainthill, Allen, Lawrence, Grantley 1094, Lockett 629 and Blunt. In CTCE, p. 196, a Huntingdon attribution is 'regarded as doubtful'.125°	1.28
			Pirim	
11	Aa	O. R.	+EADGAR REX A further away from inner circle than following D. +PIRIM MONETA HVNTE	
		(1)*	SCBI British Museum 1151, (BMC 19, Plate XIII, 9). Ex Thoresby 92(?), Fairfax, Hollis. Forgeries exist of this coin. 270°	1.31
12	Вс	O. R.	+EADGAR REX A closer to inner circle than following D. +PRIM MONETA HVNTEN Reverse corroded.	
		(1)*	Grosvenor Museum, Chester. Chester hoard (1950), 494. 115°	1.28
			The last two coins are the only ones from the reigns of Eadwig and Eadgar that may be assigned unequivocally to Huntingdon.	
			ÆTHELRED II (978–1016)	
			First Hand type (BMC iia, Hild. B1)	
			Ælfric	
13	Aa	O. R.	+ÆÐELRED REX ANGLOIX Neat bust with S-shaped tunic folds. +ÆLFRIC M-O HVNTAN Deep square sleeve with pellet. East Anglian style.	
		(1)*	RJE (H048). Ex Carlyon-Britton 481(pt), Lockett 3728, Elmore Jones 371, SCBI American Collections 402. Spink auction, 19 November 1986, 790. 270°	1,67
		(2)	National Museum of Ireland, Dublin. Castle Street 1 hoard (1993). Fragment. 90°	[0.77]
			Obverse A was also used by Oswig of Bedford, (ex Castle Street 2 hoard (1993), 1.35 g).	
14	Ab	O. R.	As above +ÆLFRIC H-O HVNTAN Shallower, wider, partly solid square sleeve. Wide final N. East Anglian style.	
		(1) (2)*	Hild. 1355. Chipped. 0° RJE (H073). Ex Spink (1992). 270°	[1.60] 1.56
15	Вс	O. R.	+Æ-DELRED REX ANGLOW  Small, crude bust with U-shaped tunic folds.  +ÆLFRIC M-O HVNTAN  Square sleeve. Spread fingers. East Anglian style.	
		(1)* (2)	SHM 28830-1. Burge, Lummelunda, Gotland hoard (1967f). 0° SCBI Copenhagen 437. Kulhusgaard hoard (1863). 90°	1.67 1.55

			THE MINT OF HUNTINGDON	95
16	Се	O. R.	+Æ-DELRED REX ANGLOIX Small face with prominent nose and U and V shaped tunic folds. +ÆLFRIC H-O HVNTAN Square sleeve. Hand inclined to dexter. East Anglian style.	
		(1) (2)*	KMK O (1993) = 711–485–1998. Smiss, Linde, Gotland hoard (1992f). $\sim$ BM (1956). 90°	1.61 1.59
17	Cf	O. R.	As above +ÆLFRIC M-O HVNTAN Square sleeve, Thumb points to first upright of N. East Anglian style.	
		(1)*	Hild. 1357. 270°	1.49
18	Dg	O.	+Æ-ÐELRED REX ANGLOTX Hair and forehead misaligned.	
		R.	+ÆLFRIC M[-]O HVNTAN  Square sleeve. Hand inclined to sinister. East Anglian style.	
		(1)*	RJE (H079). Ex Elmore Jones 372, Arnot 92. Cracked. 45°	1.58
19	Ei	O.	+Æ-DELRED REX ANGLOIX	
		R.	Tunic with neat V-shaped folds.  +- ÆLFHIC M-o NVNTANN  Square sleeve. East Anglian style.	
		(1)*	Hild. 1355 var. 0°	1.57
20	Ej	O. R.	As above +ÆLFRIC M <sup>-</sup> O HVNTAN Square sleeve, Double-barred H, East Anglian style.	
		(1)*	SCBI. South-Eastern Museums 805, Norris Museum, St Ives. Glendining, 11 October 1993, 233 (withdrawn). 270°	1.56
21	Fk	O.	+ÆÐELR[E]D REX AIGLOIX	
		R.	Crude, untidy bust and tunic folds.  +Æ-LFRIC M-O HVNTAN  Square sleeve. East Anglian style.	
		(1)*	Hild. 1356. 90°	1.56
22	Ģm	O.	+Æ-DELR[E]D REX A[I]NGLOIX Large, realistic bust. Obverse reading unclear.	
		R.	+ALFRIC M-O UVUT Round sleeve. Southern (? London) style.	
		(1)*	SCBI South-Eastern Museums 804, Norris Museum, St Ives. Glendining, 11 October 1993, 234 (withdrawn). 90°	1.21
			Other references: Ipswich (1863 hoard, see BCH No. 199, p. 73 and BNJ 33, p. 36, 2 Montagu 8 (pt), Taffs 81 (pt).	
			Wulfgar	
23	Aa	O.	+Æ-DELRED RE ANGLOIX	
		R.	+PVLFGAR M-ON HVNTAN	. 20

BMC 117. 180°

(i)\*

1.39

96			THE MINT OF HUNTINGDON	
			Second Hand type (BMC iid, Hild. B2)	
			Ælfric	
24	Aa	O. R.	+ÆÐELRÆD REX ANGLOIX +ÆLFR[]IC[]M"O HVNTA	
		(1)*	SHM 11300-4. Mannegårda, Lye, Gotland hoard (1900). 90°	1.26
			Crux type (BMC iiia, Hild. C).	
			Ælfric	
25	Aa	Ο.	+ÆÐELRÆD REX A[NG]OIX Initial + overlaps limb of initial letter. Sceptre by chin.	
		R.	+ÆLFRIC M-O HVNT  V above dexter limb of cross. T and initial cross close together.	
		(1)*	Hild. 1359. 0°	1.61
26	Вс	O.	+ÆÐELRÆD REX ANGLOIX	
		R.	Large pellet under ear. Sceptre by chin. Small X of REX. +ÆLFRIC M-O HVNT	
			V opposite lower dexter limb of cross.	3.00
		(1)* (2)	BM (1915), Ex Morgan (Evans). 0° SCBI. Copenhagen 438. Enner hoard (1849). 0°	1.61 1.61
27	Ce	O.	+ÆÐELRÆD REX ANGLOIX	
		R.	Small face. Pellet in nape of neck.  +ÆLFRIC M-O HVNT  V opposite upper dexter limb of cross.	
		(1)	Gotlands Fornsal (Läroverk/35), 270°	1.67
		(2)* (3)	BMC 118.0° SCBI Fitzwilliam 658. Chipped. 270°	[1.49]
		(4) (5)	KMK ('Ufo D'). Cut half penny. 270° NCirc, July/August 1973, 5940 (illustrated). –°	[0.86]
		(6)	NCirc. April 1968, 2795 (Plate II.4)°	1-1
28	Da	O.	+ÆÐELRÆD REX ANGLOIX Nose nearly touches sceptre.	
		R.	As above.	
		(1)* (2)	RJE (H009). Ex Lockett 3737 (pt). Spink (1978). 270° Oslo. Kaldal hoard (1898). 0°	1.62 1.61
		(3)	Hild. 1358. 90°	1.60
		(4) (5)	Lund 30311/11776. –° Gotlands Fornsal. Tingstäde hoard (1966) 131. 90°	1.59 1.54
		(6)	Gotlands Fornsal. Tingstade hoard (1966) 131. 96 Gotlands Fornsal. Tingstäde hoard (1996) 132. 0°	1.54
		(7)	Grayburn collection. Ex Doubleday 167. 90°	1.54
		(8) (9)	Västerås 15561–2. Bjurhovda hoard (1970). Pierced. 0° Glendining, 29 April 1982, 172. –°	[1.47] [ - J
29	Ec	0.	+ÆÐELRÆÐ REX ANGLOW Limb of final X under dexter limb of initial cross.	
		R.	As above	
		(1)	Dolphin (List 7, Summer 1995, 149 (illustrated)). Ex Elmore Jones 373, Arnot 112°	1.55
		(2)	SHM 20879-44. Kännungs, Hellvi, Gotland hoard (1934). 270°	1.54
		(3) (4)*	SCBI St Petersburg 365, 270° RJE (H061). Ex Glendining, 11 October 1993, 236 (pt).	1.52
		(4)	Cracked, 90°	1.48

			THE MINT OF HUNTINGDON	97
30	Fk	O.	+Æ-ÐELRÆD REX ANGLØIX  Nose and chin equidistant from sceptre head.	
		R.	+ÆLFRIC M*O HVNT  V above dexter limb of cross. Gap between T and initial cross.	
		(1)	SHM 16295-17. Djuped, Styrnas, Ångermanland hoard (1919). 270°	1.49
		(2)*	Gotlands Fornsal. Ammor, Mastorby, Gotland hoard (1947). Chipped and bent. 270°	[1.46]
			Light issue. These coins lack the sceptre dissecting the drapery (except for obverse J, used by Ælfric) and back-swept hair associated with Hildebrand variety Ca. See B.H.I.H. Stewart, 'The Small Crux Issue of Æthelred II', BNJ 28 (1957), 509–17.	
			Ælfric	
31	Gm	Ο.	+Æ-ÐELRED REX ANGLOXX Straight horizontal folds to tunic.	
		R.	+ÆLFRIC M-O HVNTA  V slightly below lower dexter limb of cross. Initial cross and Æ close together.	
		(1)* (2)	SHM 18744–1062, Digeråkra, Barlingbo, Gotland hoard (1928). 180° SHM 8503–18. Gärestad, Edestad, Blekinge hoard (1888). 180°	1.28 1.18
32	Но	Ο.	+Æ-DELRED REX ANGLOIX	
		R.	Sceptre against lips. +ÆLFRIC M°O HVNTA V opposite lower dexter limb of cross. Gap between initial cross and Æ.	
		(1)*	RJE (H062).Ex Glendining, 11 October 1993, 236 (pt). 90°	1.21
33	Iq	O. R.	+ÆDELRED REX ANGLOIX Full depth limb to Æ. +EIFRIC [II]-O HVNT	
			2.5	* **
		(1) (2)*	Lund. –/3024. Igelösa hoard (1924). –° Hild. 1360. Broken. 270°	1.18 1.12
34	Js	O. R.	+ÆDELRED RE ANGLOIX +ÆLFRIC M-O NVNTA Sceptre dissects drapery. Sceptre head of pellets on short stems.	
		(1)*	Lund, -/3023. Igelösa hoard (1924), -°	10.1
			Other references: 1 Montagu 779, 'ÆLFC MO HVNT' (sic); CNS, Myrände, Atlingbo, Gotland hoard (1893), coin dispersed; NCirc, October 1972, 9241, '+ÆLFRIC M-O HVNT'.	
			Leofric	
35	Aa	O. R.	+ÆÐELRÆD REX ANGL[C·]X Sceptre head in front of nose. +LEOFRIC M·O NVNTA F opposite upper sinister limb of cross.	
		(1)* (2)	SHM 11385-1. Prostarve, Hogrän. Gotland hoard (1896). 180° Stockholm. 'D/13', Fragment. 180°	1,24 [0.86]
36	Ab	O. R.	As above +LEOFRIC M <sup>-</sup> O NVNTA F above sinister limb of cross.	
		(1)*	SCBI South-Eastern Museums 835. Norris Museum, St Ives. $0^{\circ}$	1.16

98			THE MINT OF HUNTINGDON	
37	Bc	O.	+Æ-ÐELRÆD REX ANGLOX Sceptre head partly below nose.	
		R.	+LEOFRIC M-O HVNTA F opposite sinister limb of cross.	
		(1)*	Hild. 1382. 270°	1.24
			Osgut	
38	Aa	O.	+ÆÐELRÆD REX ANGLOIX Gap between sceptre head and nose and mouth.	
		R.	+OSGOD M-O HVNTA M beneath bottom limb of cross.	
		(1)* (2)	Hild. 1386. 180° BM (1928). Ex Spink, Vogel 4615. 180°	1.32 1.20
39	Bc	O.	+ÆÐELRÆD R[A]NGLOIX Sceptre head close to nose and mouth, large chin pellet above	
		R.	tunic pellet. +OSGOD M-O HVNTA	
		K.	M offset to sinister of bottom limb of cross.	
		(1)*	Grosvenor Museum, Chester. Ex Pritchard. 180°	1.26
			There are three fragments, apparently of Huntingdon, which have not been matched with existing dies:	
			(1) [ ] VNTA. SHM 13867–34. Gudings, Vallstena, Gotland hoard (1909f). 180° [0.36g]	
			(2) [] NTA. SCBI St Petersburg 566. 90° [0.25 g] (3) [] TA. SCBI St Petersburg 567. 270° [0.22 g]	
			Long Cross type (BMC iva, Hild. D)	
			Owing to typeface limitations it is not possible in many instances to represent accurately the central element of the M[]O copulative in this and subsequent types. The various comma/crescent shaped characters occurring in the copulative and elsewhere in the inscriptions are rendered	
			passim as *,'.	
40	(4/2)	0	Ælfric (standard issue)	
40	Aa	Ο.	+'ÆÐELRÆD REX ANGLO Large eye. O overlaps shoulder,	
		R.	+ÆL/FRIC/M'O N/VNT	Transit
		(1) (2)*	Lund –/3561. Igelösa hoard (1924). 0°  SCBI South-Eastern Museums 908, Norris museum, St Ives. 270°	1.80 1.69
		(3)	SCBI Copenhagen 441. 90°	1.67 1.66
		(4) (5)	Hild. 1370. 180° SHM 26697–89. Ekeskogs, Hejde, Gotland hoard (1961). 270°	1.66
		(6)	Gotlands Fornsal. 90°	1.57
41	Bc	O.	+'ÆÐELRÆD REX ANGLO Small eye, Ø touches shoulder.	
		R.	+'ÆL/FRIC/Mºº O/NVNT	
		(1)	SHM 16200-103. Sigsarve, Hejde, Gotland hoard (1918f). 0°	1.72 1.71
		(2)	SHM 17234–1. Koparve, Rute, Gotland hoard (1923f). 90° SCBI West Country Museums 527. Shaftsbury hoard (1940). 180°	1.69
		(4)*	SCBI St Petersburg 696. 180°	1.67
		(5) (6)	SHM 20879-197. Kännungs, Hellvi, Gotland hoard (1934). 270° RJE (H030). Ex Baldwin (1980). 90°	1.67 1.67
		0.00	The state of the s	

			THE MINT OF HUNTINGDON	99
		(7) (8) (9)	SHM 14935–63. Sandtorp, Viby, Närke hoard (1913), 90° Lund -/3558. Igelösa hoard (1924). –° SCBI Finland 209. Hämcenlinna (Tavastehus), Linnaniemi hoard	1.66 1.66
		(10)	(1894). Remains of suspension loop. 180° SHM 20879–195. Kännungs, Hellvi, Gotland hoard (1934). 0°	[1.65] 1.64
		(11)	SCBI South-Eastern Museums 909, Norris Museum, St Ives. Ticket reads incorrectly 'found at Hemingford Grey'. 90° Elmore Jones 374. –°	1.54 1.53
42	Bd	Ο.	As above	
42	Du	R.	+ÆL/FRIC/Mº O/NVNT Bar of copulative lower than foot of M.	
		(1)	SHM 14091-1563. Stora Sojdeby, Fole, Gotland hoard (1910f). 0°	1.68
		(2) (3)*	Doubleday 168. Ex Duke of Argyll. 0° RJE (H003). Ex Draycott. Seaby (1977). 0°	1.65 1.65
		(4)	SHM 23040-78. Hallsarve, När, Gotland hoard (1942), 0°	1.60
		(5) (6)	Copenhagen. Iholm hoard (1853)? -° Ex RJE (H019). SCMB November 1968, H1936 (Plate 69), May	1.53
		107	1969, H2117 (Plate 41), December 1969, H2468 (Plate 91),	
			August 1974, H4434 (Plate 53). Baldwin (1978). 0°	[-]
43	Be	O.	As above	
		R.	+'ÆL/FRIC/M'O N/VNT Tall final N. Upright of R tucked under F.	
		(1)	Williams collection. Ex Oman, N Circ, September 1994, 7162	
		Say	(illustrated), Arnot 143, Dolphin (List 7, Summer 1993, 152	
		(2)	(illustrated)). 180° Lund -/3556. Igelösa hoard (1924). –°	1.67 1.64
		(3)*	RJE (H023). Ex Spink (1980). 270°	1.61
44	Bf	O.	As above	
		R.	+ 'ÆL/FRIC/M'O N/VNT	
			Wide final N. R parallel to F.	
		(1)*	RJE (H020). Ex Baldwin (1979). 90°	1.57
45	Cg	Ο.	+ ÆÐELRÆD REX ANGLO	
		R.	Small head, prominent nose. +ÆL/FRIC/M <sup>-</sup> O N/VNT	
		(1)*	SHM 20879-198. Kännungs, Hellvi, Gotland hoard (1934). 90°	1.60
46	Ch	Ο.	As above	
10	Sin	R.	+ÆL/FRIC/M'O H/VNT	
		(1)*	SCBI Glasgow 850. 90°	1.52
47	Ci	O. R.	As above +ÆL/FRIC/M-OH/VNT	
		(1)*	SCBI St Petersburg 697. 270°	1.56
48	Dj	O.	+ÆÐELRÆD REX ANGLO	
		R.	Small jaw, hook-shaped ear. +ÆL/FRIC/MΩO/NVN	
		(1)*	Hild. 1368. 0°	1.51
49	El	O.	+ÆÐELRÆD REX ANGL	
		R.	Tall bust, eye set back. +ÆL/FRIC/U'O:/NVII	
		(1)	SCBI South-Eastern Museums 911. Norris Museum, St Ives.	
		No. V	Glendining. 11 October 1993, 241(pt), withdrawn. 90°	1.51

		(2) (3)	Hild. 1364. 90° Stockholm. Stora Sojdeby hoard (1990). –°	1.46 1.46
		(4)*	SCBI South-Eastern Museums 910, Norris Museum, St Ives. Glendining, 11 October 1993, 244, withdrawn. 90°	1.44
50	Em	O. R.	As above +ÆL/FR'I'/C M'O/NVN	
		(1)* (2)	Hild. 1369. 270° Uppsala University 131. 90°	1.44 1.43
51	En	O. R.	As above ]EL/FRIC/M'O/N[	
		(1)*	SCB1 St Petersburg 699. Vikhmiaz hoard (1934). Fragment. 0°	[1.22]
52	Fl	Ο.	+Æ-ÐELRÆD REX ANGO L and O superimposed.	
		R.	As above	
		(1)*	Lund 30311/11777°	1.38
			Obverse F is also found linked to a corrupt Scandinavian reverse. See Brita Malmer, <i>The Sigtuna Coinage</i> , c.995–1005, CNS Nova Series 4 (Stockholm. 1989) Plate 9, 211, die chain 11.	
53	Gl	O.	+ÆÐELRÆD REX ANGLO	
		R.	Long backward-sloping nose, hook shaped ear. As above	
		(1) (2)*	Lund -/3565. Igelösa hoard (1924)° St Petersburg (Inv. 81975)°	1.36 1.34
54	Hi	O.	+ÆÐELRÆD REX ANGLO	
		R.	Small jaw. Crescent shaped ear. As above	
		(1)*	Hild. 1367. 90°	1.58
		(2)	SCBI St Petersburg 698. 90° SHM 9392–1319. Myrände, Atlingbo, Gotland hoard (1893). 90°	1.52 1.52
55	Но	O. R.	As above +:ÆL/FRIC/ MΩΘ/NVNT	
		K.	Bar of copulative higher than foot of M.	
		(1)	SHM 28830-13. Burge, Lummelunda, Gotland hoard (1967f). 90°	1.58
		(2)	Hild, 1371, 180° KMK 101743–0. Sälle, Fröjel, Gotland hoard (1987). –°	1.56 1.55
		(4)*	RJE (H001). Ex Baldwin (1977). 180°	1.52
		(5)	Hild. 1372. 0°	1.52 1.49
		(6) (7)	SCBI Reading 83. 180° BMC 119. Ex Pembroke 47 (1848). See BNJ 28(1955), p. 51. 180°	1.46
		(8)	Barsham hoard (1986). Corroded. 180°	[1.30]
		(9) (10)	Barsham hoard (1986). Corroded. 0° Bergen. Nesbø hoard (1891). Fragment. 180°	[1.22]
		(11)	Barsham hoard (1986). Corroded. 180°	[0.97]
		(12)	KMK 100975. Koparve, Rute, Gotland hoard (1923f)? Cut half penny. 0°	[0.81]
56	Hp	O.	As above	
		R.	+ÆL/FRIC/MΩO/NVNT Bar of copulative points to middle of O.	
		(1)*	Glendining, 11 October 1993, 242 (pt)°	1.46

			THE MINT OF HUNTINGDON	101
57	Hq	O. R.	As above +ÆL/FRIC/M'O N/VNT	
		(1)*	RJE (H022). Ex Baldwin (1980). Corroded. 0°	[1,42]
58	Ir	O.	'+' ÆÐELRÆD REX ANGL Neat rounded bust.	
		R.	+ÆL/FRI/CM'O/HVN	
		(1)* (2)	Hild. 1363. 0° Schleswig. List hoard (1937) 181. –°	1.35 1.02
			Obverse I is also used by Eadwerd at Rochester. Stavanger, from Jösang hoard (1923), 1.38 g.	
59	Is	O. R.	As above +ÆL/FRI/[]M'O/HVN	
		(1)*	Lund 30311/11778°	1.32
60	Jt	O.	+ÆÐELRÆD RE[] ANGLØ Neat bust, offset to sinister.	
		R.	+ÆL/FRI/C M'O/HVN	
		(1)* (2)	Lund -/3559. Igelösa hoard (1924)° SHM 8503-59. Gärestad, Edestad, Blekinge hoard (1888). 270°	1.34 1.32
COLIC	1-4011	1000	Obverse J is also used by Eadwerd at Rochester (Elmore Jones 670).	
61	Kv	O. R.	+ÆÐELRÆÐ REX ANGLØ Straight line of hair pellets from nape of neck. Small Ø. +ÆL/FRI/C M'O/HVN	
		(1)* (2)	Lund –/3557. Igelösa hoard (1924). –° Schleswig, List hoard (1937) 182. –°	1.37 1.36
		(3)	Hild. 1366. 0°	1.33
		(4)	Bird 142. –°	1.28
		(5)	SHM 19884–220. Ammunde, Burs, Gotland hoard(1931). Buckled, 0°	1.14
		(6)	SCMB January 1967, H38 (Plate 8). Probably not Bird 142°	[-]
			Additionally two fragments in SCBI Poland 81 appear to be from dies Kv. 0°. [0.66 g].	
			Obverse K is also used by the following four moneyers: Æthelwerd, London (SCBI St Petersburg 760);	
			Eadmund, London (Hild. 2346);	
			Godman, London (SCBI St Petersburg 791) and Heawulf, London (Lund, from Igelösa hoard (1924), 1.31 g).	
62	Lv	Ο.	+Æ-ÐELRÆD REX ANGLO Small cranium, crescent shaped ear.	
		R.	As above	
		(1)*	RJE (H075). Ex Glendining, 11 October 1993, 243. Dolphin (List 5, 1994, 6087 (illustrated) and List 6, 1995, 93 (ditto)). 0°	1.25
			Ælfric (subsidiary variety). See BNJ 34 (1965), 37-41.	
63	Aa	O.	+E-DELRED RE AIGO Tall, narrow bust with straight nose.	
		R.	+ÆL/FRI/C M'O/HVN	
		(1)* (2)	SHM 26697–88. Ekeskogs, Hejde, Gotland hoard (1961). 180° SCBI St Petersburg 700, Lodejno Pole hoard (1949). 180°	1.43 1.30

64	Ba	O. R.	+E-DELRED REX AIGO Tall, narrow bust with pugilistic face and curving nose. As above	
		(1) (2)* (3)	SHM 20879–196. Kännungs, Hellvi, Gotland hoard (1934). 180° SCBI Copenhagen 440. 180° Hild. 1365. 180°	1.38 1.38 1.25
65	Ca	O.	+ÆDELRÆD REX AN Compact bust with narrow shoulders.	
		R.	As above	
		(1) (2) (3)* (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14)	SHM 14565–17. Amlings, Linde, Gotland hoard (1911). 90° SHM 16009–13. Fardume, Rute, Gotland hoard (1917). 270° Hild. 1361. 270° SCBI South-Eastern Museums 907, Norris Museum, St Ives. 90° SHM 15152–20. Kvie, Lojsta, Gotland hoard (1914). 0° SHM 23228–45. Botarve, Väte, Gotland hoard ('new find'). 180° KMK 100601. Garde, Stenkyrka, Gotland hoard (1935f). 90° Details ex BM, 16 October 1984. No provenance. 90° KMK 100601. Garde, Stenkyrka, Gotland hoard ('new find'). 90° SCBI Copenhagen 439. Stolpehuse hoard (1837). 270° Details ex BM, 17 January 1984. Everlöv hoard (c.1900). 235° (sic) KMK 101975–46. Uddvide, Grotlingbo, Gotland hoard (1990). –° SHM 14935–62. Sandtorp, Viby, Närke hoard (1913). 90° Private collection. Hemmestorp hoard (pre 1945). CNS 3 April 1959, 558 or 559. –°	1.32 1.30 1.30 1.30 1.28 1.28 1.28 1.27 1.26 1.25 1.19 1.18
66	Dg	O.	+ÆDELRÆD REX ANG	
		R.	Neck line runs from ear lobe. +ÆL/FRIC/M'OI/HVN	
		(1)*	Hild. 1362. 270° Obverse D is also used by the moneyer Eadwine at Southwark (SCBI Estonia 306).	1.33
67	Ei	O. R.	+Æ-ÐELRÆD RE AIGO Startled face with marked jaw line. +ÆL/FRI/CII'O/ИVH	
		(1)*	Stockholm A927-55. Stale, Rone, Gotland hoard (1954f). 180°	1.30
68	Ej	O. R.	As above +ÆL/FRI/C M³Θ/UV[II]	
		(1)*	KMK 0/26. No provenance. Chipped. 180°	[1.14]
69	Fk	O. R.	+ÆDELRÆD REX ANG Three (?) horizontal garment folds. +ÆL/FRI/C M³O/I/VN	
		(1)*	Lund -/3564. Igelösa hoard (1924)°	1.25
70	Gm	0.	+ÆDELRÆD REX AIG Five horizontal garment folds.	
		R.	+ÆL/FR'T/C M'O/HVN	
		(1)* (2)	RJE (H018). Ex Elmore Jones 375. Baldwin (1978). Cracked. 90° Lund -/3562. Igelösa hoard (1924)°	1.16

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			Other references (where it is not possible to distinguish between the standard issue and subsidiary variety): 1 Montagu 788 (pt),   *ÆLFRIC MO HVNT'; 1 Montagu 790 (pt), *ÆLFRIC MOO HVNT'; 2 Montagu 23 (pt), *ÆLFRIC MOO NVNT'; 2 Montagu 24 (pt), *ÆLFRIC MO HVN'; Carlyon-Britton 514 (pt), *ÆLFRIC M'OI HVN'; 3 Grantley 1128 (pt), *ÆLFRIC M'O HVNT'; Parsons 167 (pt), *ÆLFRIC MO NVNT'; Taffs 85 (pt), *ELFRIC MO HVNT'; NCirc, December 1972, 11654, *ÆLFRIC MO NVNT'.	
			Eadwine	
71	Aa	O. R.	+ÆÐELRÆD REX ANGL' +EDP/INEI/M'O H/VNTE	
		(1)*	Hild. 1378. 180°	1.34
			Obverse A was also used by the London moneyer Leofnoth (Hild. 2670).	
72	Ва	O. R.	+ÆDELRÆD REX A[ As above	
		(1)*	RJE (H027). Ex Baldwin (1980). Fragment. 270°	[0.74]
			Obverse B was also used by the moneyer Eadric (or Godric) at London (see <i>NCirc</i> , September 1979, p. 380, for cut half penny found at Compton, near Winchester).	
73	Ca	O. R.	+ÆDELRED REX ANGLOI As above	
		(1)*	Lund/3566. Igelösa hoard (1924). $0^{\circ}$	1.02
			Obverse C was also used by the moneyers Ælfwig of Buckingham (Hild.115) and Godric of Hertford (SCBI Glasgow 849).	
			Osgut (standard issue)	
74	Aa	O. R.	+E-DELRÆD REX ANGLO Lips immediately under nose. +OS/GVT/M ΩΘ/NVNT	
			Pellet in fourth quarter.	
		(1)*	RJE (H040). Ex Sotheby, 6 December 1983, 94 (illustrated). Purportedly from a 'Scandinavian hoard'. 0°	1.80
		(2)	SCBI South-Eastern Museums 916, Norris Museum, St Ives. Incorrectly ticketed 'found at Hemingford Grey', 0°	1.55
75	Ab	O. R.	As above +OS/GVT/MQO/NVNT	
		(1) (2) (3) (4) (5)*	SHM 23228–46. Botarve, Väte, Gotland hoard (1943). 270° Uppsala university 132. 180° Lund 30311/11780. –° SHM 22468–75. Bosarve, Stånga, Gotland hoard (1939f). Fragment. 0° Lund. –°	1.69 1.68 1.58 [1.44] 1-1
76	Ba	O. R.	+ÆÐELRÆD REX ANGLO Nose and forehead in continuous curve. As above	
		(1) (2) (3)*	SHM 14955–8. Frigsarve, Grötlingbo, Gotland hoard (1913). 180° Lund –/3560. Igelösa hoard (1924). –° SHM 20879–199. Kännungs. Hellvi, Gotland hoard (1934). 180°	1.70 1.69 1.66

		(4) (5) (6) (7)	Hild. 1389, 180°  SCBI Estonia 170. Possibly from Kunda hoard (1894). 0°  SCBI Finland 210. 0°  RJE (H007), Ex Baldwin (1978). Three fragments. 180°	1.61 1.61 1.60 [1.51]
77	Bb	O. R.	As above As above	
		(1) (2)*	Lund -/3563. Igelösa hoard (1924)° Bergen. Slethei hoard (1866). Broken but complete. 90°	1.65 1.54
78	Ce	O. R.	'+'ÆÐELRÆD REX ANGLØ +OS/GVT/M'Ø N/VNT Pellet in first quarter.	
		(1) (2) (3)* (4) (5) (6)	Lund 30311/11779°  BMC 120. 0°  RJE (H037). Ex SCBI Mack 924. Spink (1982). 90°  KMK 100604–9. Tune, (Tystebols), Stenkyrka, Gotland hoard (1916f)°  Hild. 1388. 90°  SCBI South-Eastern Museums 912, Norris Museum, St Ives. Incorrectly ticketed 'found at Hemingford Grey'. 0°  SHM 14955–9. Frigsarve, Grötlingbo, Gotland hoard (1913). Cut half penny. 90°	1.70 1.62 1.61 1.50 1.48 1.40
79	Cf	O. R.	As above +OS/GVT/M'O N/VNT V lower than adjacent N.	
		(1)*	SHM 14091-1564. Stora Sojdeby, Fole, Gotland hoard (1910f). 0°	1.55
80	Dg	O. R.	+ÆÐELRÆD REX ANGO +OS/GVT/M¹Ω¹O/NVNT	
		(1)* (2)	SCBI Copenhagen 445. Enner hoard (1849). 235° RJE (H077). Ex Glendining, 11 October 1993, 242 (pt), Dolphin (List 6, 1995, 94 (illustrated)). 90°	1.60 1.45
81	Dh	O. R.	AS ABOVE +OS/GVT/M'O N/VNT V aligned with following N. First N wide and almost an H.	
		(1) (2)* (3) (4) (5) (6) (7) (8)	SHM 20879–200. Kännungs, Hellvi, Gotland hoard (1934). Bent. 0° Hild. 1387. 270° RJE (H051). Ex Doubleday 169. 90° Glendining, 11 October 1993, 241 (pt), withdrawn. –° BM (1915). Ex Morgan (Evans). 0° RJE (H029). Ex Baldwin (1980). Pierced. 270° SCBI South-Eastern Museums 914, Norris Museum, St Ives. Incorrectly ticketed 'found at Hemingford Grey'. 0° SHM 20879–201. Kännungs, Hellvi, Gotland hoard (1934). Cut half penny. 270°	1.56 1.46 1.42 1.39 1.38 [1.38] 1.35
82	Di	O. R.	As above +OS/GVT/M*O N/VNT Pellet in third quarter.	
		(1) (2) (3) (4)*	BM (1922). 180° Stockholm, 'D/28'. 180° SHM 14565–18. Amlings, Linde, Gotland hoard (1911). 0° RJE (H008). Ex Argyll, Baldwin (1978). 180°	1.56 1.34 1.30 1.26

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83	Df	O.	As above	
		R.	As above	
		(1)* (2)	Ex Harris collection. –° RJE (H014). Seaby (1978). 270°	1.46 1.44
		(3)	BNJ 68 (1998), Coin Register, 129, p. 173. Stoneham Aspal find	
		(4)	(1988)° Spink Auction, 13 October 1982, 346 (illustrated). Ex Lockett	1.42
		(5)	3746. 235° (sic) SCBI South-Eastern Museums 915, Peterborough. 0°	1.40 1.28
		(6)	SCBI American Collections 444. Chipped. 0°	[1.11]
84	Dj	Ο.	As above	
		R.	+OS/GVT/M <sup>2</sup> O N/VNT V aligned with following N. First N conventionally barred.	
		(1)*	SCBI Glasgow 851. Chipped and pierced. 180°	[1.31]
85	Ek	O.	+E-DELRED REX ANGL	
		R.	+OS/GVT/M'O V/NTD	
			Pellet in annulet in second quarter.	
		(1)*	Gotlands Fornsal 1383/29. Österby, Othem, Gotland hoard (1920), 90°	1.28
				1.20
86	Fm	O. R.	+E-DELRÆD REX ANG +OS/GVT/M·O N/VNT	
		1	Pellet in first quarter.	
		(1)	SHM 14091-1565. Stora Sojdeby, Fole, Gotland hoard (1910f)°	1.34
		(2)*	SCBI South-Eastern Museums 913, Norris Museum, St Ives. Incorrectly ticketed 'found at Hemingford Grey'. 180°	1.30
		(3)	SHM 14091–108. Stora Sojdeby, Fole, Gotland hoard (1910f). 0°	1.06
			Osgut (subsidiary variety)	
87	Aa	O.	+ÆÐELRÆD REX ANGL	
		R.	+OS/GVT/M'O V/NTD Pellet in second quarter.	
				1.20
		(1)*	Hild. 1390. 0°	1.30
88	Ba	O. R.	+ÆÐELR[E]D REX ANGL As above	
				(1.20)
		(1)*	SCBI St Petersburg 702. Pierced. 270°	[1.28]
89	Ce	O. R.	+ÆÐELRÆD REX AN +OS/GVT/M*O/HVN	
		2450	Pellet in second quarter.	
		(1)*	SCBI St Petersburg 701. Vaskovo hoard (1923), 270°	1.33
			Other references (where it is not possible to distinguish with	
			certainty between the standard issue and subsidiary variety): 2 Montagu 25 (pt), 'OSGVT MO HVNT'; 5 Montagu 12 (pt),	
			OSGVT MOOHVNT'; Bruun 144 (pt), 'OSGVT M'O VNTD	
			(sic)'; Talbot Ready 119; Drabble 469, 'OSGVT, extra pellet in one angle'; Grantley 1128 (pt), 'OSGVT MΩO HVNT'.	
			65 E 62 D	
			Helmet type (BMC viii, Hild. E)	
			Æthelstan	

106				
90	Aa	Ο.	:+ÆÐELRÆD REX ANG Peaked helmel.	
		R.	+ED/ELST/AN M/³⊙ HV. Free-standing apostrophe.	
		(1)	Everlöv (c. 1900) or Hemmestop hoard (pre 1945)? Whereabouts unknown. 90°	1.51
		(2) (3)*	Hild. 1351. 90° SHM 9392–1390. Myrände, Atlingbo, Gotland hoard (1893). 90°	1.49 1.48
91	Ba	Ο.	:+EDELRÆD RE:X ANG Peakless helmet. Elongated upright to first R.	
		R.	As above	
		(1)*	RJE (H078). Glendining, 11 October 1993, 248 (pt), withdrawn. Catalogued as 'Ælfnoth'. Baldwin (1995). 180°	1.50
		(2)	SCBI South-Eastern Museums 952, Norris Museum, St Ives. Glendining, 11 October 1993, 248 (pt), withdrawn. Catalogued as 'Ælfnoth'. 90°	1.46
		(3)	BMC 121. Russian hoard (1850). 180°	1.43
92	Вс	O. R.	As above +ÆÐ/ELZT/AN M/³⊙ HV.	
			Large O. Apostrophe superimposed on cross.	
		(1)	SCBI Mack 984. Ex Shand 336. 0°	1.47
		(2) (3)*	Lund 30311/11782: 270° RJE (H049). Spink Auction, 19 November 1986, 803. Ex	1.45
			Lockett 3742 (pt), Elmore Jones 376 (illustrated), SCBI American Collections 465. 0°	1.44
		(4)	Stockholm 'LV38/33', 0°	1.42
93	Cc	O. R.	+E[D]ELR[ÆD] REX A[L]O As above	
		(1)*	Hild. 1374. 90°	1.47
94	Dc	Ο.	+EDELRED REX EIGO Geometric design by forehead.	
		R.	As above	
		(1)* (2)	SCBI Copenhagen 442. 0° SCBI St Petersburg 1007. 0°	1.43 1.40
95	Dg	Ο.	As above	
	n#-	R.	+ÆÐ/ELZT/AN M/'O NV Proportionately sized O touching apostrophe.	
		(1)*	SHM 16295-499-71. Djuped, Styrnäs, Ångermanland hoard (1919). 0°	1.44
96	Eg	Ο.	+EDELRED RE+ EIGO Helmet not joined to head.	
		R.	As above	
		(1)* (2)	SHM 16504–119. Ocksarve, Hemse, Gotland hoard (1920f). 270° Gotlands Fornsal (Läroverk/217). 270°	1.44 1.43
97	Ei	O. R.	As above +ÆÐ/ELZT/ΑͶ Μ/'Θ NV	
		(1) (2)*	Hild. 1375. 180° SCBI St Petersburg 1008. 90°	1.28 1.27

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98	Fk	O.	+ÆDELRÆD REX AN	
		R.	Ornate helmet. +ÆÐ/EST/ANM/O VNT	
		(1) (2)*	Lund 30311/11781°  SCBI St Petersburg 1009, 180°	1.49 1.48
99	Gm	Ο.	+ÆÐELRÆD REX ANG	
		R.	+ÆÐ/ELST/AN WO HV Pellet in first and third quarters.	
		(1)	Hild. 1373. 0°	1.29
		(2) (3)*	Gotlands Fornsal (Läroverk/216), 0° BM (1915), Ex Morgan (Evans), 0°	1.27 1.24
100	Но	Ο.	+Æ-ÐELRÆD REX ANGL' Pellet crowded between L and shoulder.	
		R.	+ÆÐE/LSTA/N N'O/HVNT Trefoil points to N of HVNT.	
		(1) (2)*	Trondheim, Dronningens Gate hoard (1950). Broken, 0° SCBI St Petersburg 1006, 0°	1.19 1.17
			Obverse H was also used at Huntingdon by Osgut (see obverse C).	
101	Iq	Ο.	+ÆÐELRÆD REX ANGL' Pellet well-spaced between L and shoulder.	
		R.	+ÆÐE/LSTA/N M'O/HVNT Trefoil points towards V of HVNT.	
		(1)*	SHM 11300-49. Mannegårde, Lye, Gotland hoard (1900)°	1.16
			Other references: 2 Montagu 30 (pt), '+ÆÐELSTAN MO HV'.	
			Cniht	
102	Aa	Ο.	+ÆÐELRÆD RE+ ANGL Heavily bearded bust.	
		R.	+CIH/T M[]O/HVN/TAD:	
		(1)*	SHM 11300-50. Mannegårde, Lye, Gotland hoard (1900). 90°	1.12
			Eadwine	
103	Aa	O. R.	+ÆÐELRÆD REX ANGL +ED[P]/INE [II]/O HV/NTA	
		(1)*	SCBI Copenhagen 444. Hess 664. 45°	1.29
			Osgut	
104	Aa	O. R.	+ÆDELRÆD REX AN +OS./GVT/M'O V/NTD	
		(1)* (2)	RJE (H043). Glendining, 19 September 1984, 52. 180° Uppsala University 133. 0°	1.47 1.39
		(3)	Hild. 1391. 270°	1.38
105	Вс	O. R.	+ÆÐELRÆD REX ANG· +ØG/V M'O/HV'/NTA	
		(1)*	Hild. 1384. 270°	1.59
		(2)	SCBI Finland 393. Broken. 90° RJE (H011). Ex Elmore Jones 377. Spink (1978), 270°	1.27 1.24

108			THE MINT OF HUNTINGDON	
			Obverse B is also used by Leofsige at Cambridge (see Kenneth Jacob in <i>SCMB</i> February 1984, p. 40 and Plate I, 18).	
106	Cc	O. R.	+ÆÐELRÆD REX ANGL' As above	
		(1)* (2)	Hild. 1385. 180° SHM 16295–503–72. Djuped, Styrnäs, Ångermanland hoard (1919)? Cut quarter penny. 90°	1.29 [0.34]
			Obverse C was also used at Huntingdon by Æthelstan (see obverse H).	
			Sæwine	
107	Aa	O. R.	+ÆÐELRÆD REX ANGLO +SÆP/INE M/'O HV/NTA'	
		(1)*	Hild. 1395. 270°	1.47
108	Ab	O. R.	As above +SEPI/NE M'/O HV/NTA'	
		(1)* (2) (3) (4)	Hild. 1396. 0°  SCBI St Petersburg 1010. 0°  KMK 102449–86. Lilla Klintegårde, Väskinde, Gotland hoard (1989). –°  RJE (H005). Ex Lockett 692, Elmore Jones 378, SCMB  December 1971, H2324, March 1972, H2658, July 1972,	1.43 1.43 1.41
		(5)	H3078 (Plate 56), November 1972, H3281 (Plate 92) and October 1976, E243. Baldwin (1977). 0° KMK 101273–14. Rangvelds, Havdhem, Gotland hoard (1977f) –°	1.37 1.37
			Dr G.L.V. Tatler claimed (c. 1980) to possess a die duplicate of Elmore Jones 378 which has not been traced.	
			Other references: Carlyon-Britton 521 (pt), '+SÆPINE MO HVNTA.'  (Unidentified moneyer)	
109	Xx	O. R.	+ÆDELRÆD [ ] [ ]/O HV/NTA	(0.75)
		(1)*	Bergen, Nesbø hoard (1891), Fragment, 180°	[0.75]
			Last Small Cross type (BMC i, Hild. A)  The busts in this type are based on the classification devised by M. Dolley in Some Reflections on Hildebrand Type A of Æthelred II, (Antikvariskt archiv 9, pp. 10–41), and revisions made by Stewart Lyon in 'Die-Cutting Styles in the Last Small Cross Issue of c.1009–1017', BNJ 68 (1998), 21–41.	
			Ælfget	
110	Aa	O. R.	+E-DELRÆD REX ANGL London (or Eastern) bust. Lyon, London B. +ÆL FGET MON HVNTA	
		(1)*	Lyon collection. Ex Carlyon-Britton 470 (pt), Lockett 4605 (pt), 90°	1.14
		7777	Obverse A was also used by the moneyer Godwine of London. See BNJ 31 (1962), p. 173 and 68 (1998), p. 38 and Plate 5, 7–8.	

			THE MINT OF HUNTINGDON	109
			Ælfnoth	
111	Aa	Ο.	+'Æ-ÐELRÆD R·EX- A·NGL· Classified by Dolley as 'uncertain'. Lyon, Exeter B.	
		R.	'+'AELFNO-D ON HVNTA	
		(1)	Hild. 1353. Fragmented square planchet. 90° The dies used to strike this coin appear to have fallen into Scandinavian hands, as represented by a striking recorded by Brita Malmer in <i>The Anglo-Scandinavian Coinage</i> , c.995 – 1020, Commentationes de Nummis Saeculorum IX–XI in Suecia Repertis, Nova Series 9 (Stockholm, 1997), p. 235, no. 610: 1701 (illustrated), weighing 2.25 g.	[1.88]
		(2) (3)	SHM 9393–1463. Myrände, Atlingbo, Gotland hoard (1983). 180° B. Ahlstrom Mynthandel AB, 11 December 1989, 435. –°	1.75 1.73
		(4)*	RJE (H076). Ex Glendining, 11 October 1993, 249. Dolphin (List 6, 1995, 95 (illustrated)). 270°	1.31
		(5) (6)	SHM 23228-132. Botarve, Väte, Gotland hoard (1943f). 270° SHM 12079-258. Stige, Indal, Medelpad hoard (1904). Bent. 0°	1.30 1.27
		(7)	SCBI St Petersburg 1203. 270°	1.22
		(8) (9)	Hild, 1352. Cracked (and corroded?). 0° SHM 5247–72–27. Burge 2, Lummelunda, Gotland hoard	[1.04]
		9-8	(1972f). Fragment. 270°	[0.92]
112	Вс	O.	+ÆÐELRÆD REX ANG	
		R.	Northern 'A' bust. Lyon, Lincoln Cm. Forehead points to G. +ÆLFNOÐ M'O HVNT	
		(1) (2)*	SCBI Copenhagen 436. Stolpehuse hoard (1837). 180° SHM – 16504–146. Ocksarve, Hemse, Gotland hoard (1920f). 180°	1.45 1.44
113	Ce	O. R.	+ÆÐELRÆD REX ANGL Northern 'B' bust. Lyon, Lincoln B. +ÆLFNÐÐ MO HVNTED	
		(1) (2)* (3) (4)	RJE (H063). Ex Glendining, 11 October 1993, 250, 270° Hild. 1354, 270° BM (1915).Ex Morgan (Evans). 180° Trondheim. Dronningens Gate hoard (1950). Bent. 0°	1.38 1.35 1.32 1.25
114	Dg	Ο.	+E-DELR[Æ]D REX ANG Northern 'A' bust. Lyon, Lincoln CI. Forehead points to N.	
		R.	+EL[F]NOĐ ON HVNT Lyon, East Anglian reverse. T over D.	
		(1)*	Hild. 1379. Pierced. 270°	[1.27]
115	Ei	Ο.	+ÆÐELRÆD REX A[NG]O Northern 'A' bust. Lyon, Lincoln Cl.	
		R.	+[Æ]L·FNOÐ ON HVN Lyon, East Anglian reverse.	
		(1)*	Grayburn collection. 'Cnut' hoard (c.1993). 45°	1.01
			Other references: I Montagu 763 (pt) (1896), '+ÆLFNOÐ MO HVNTED'.	
			Æthelstan	
116	Aa	O. R.	+ÆÐELRÆD REX ANGLO Classified by Dolley as Northern 'A'. Lyon, Winchester A. +ÆÐESTAN ON HVNTAN Obverse A is also used by the Huntingdon moneyer Sæwine	
			(see die B).	

		(1) (2) (3)**	KMK 95 (1999) = 711–484–1998. 0° SCBI Copenhagen 443. Meinander find (1945). 270° Hild. 1377. 90°	1.73 1.72 1.72
117	Вс	O. R.	+Æ-ÐELRED REX ANGL Northern 'A' bust. Lyon, Lincoln Cl. +Æ-ÐESTAN M'O HVNT	
		(1) (2)*	SCBI South-Eastern Museums 965, Norris Museum, St Ives. 0° Hild. 1376. 0°	1.34 1.32
			Æthelweard	
118	Aa	O. R.	+ÆÐELRÆD REX ANG- Northern 'A' bust. Lyon, Lincoln Cm. +ÆÐELPEARD M'O HV	
		(1)* (2)	Hild. 1373 var. 270° Stockholm A 927–55. Stale, Rone, Gotland 'new find'. 0°	1.54 1.26
			Leofric	
119	Aa	O. R.	+ÆÐELRÆD REX ANGLORV Southern 'B' bust. Lyon, Winchester A. +LEOFRIC ON HVNTANDVN.	
		(1)*	Hild. 1381, 180°	1.65
		3N.E.Z.	Manwine	
120	Aa	0.	+ÆDELRÆD REX'A'NGLO' London bust, Lyon, London DI.	
		R.	+MANPINE MO'O'I HVNTE:	1.07
		(1)*	Hild. 1383. 0°	1.27
	No.		Sæwine	
121	Aa	Ο.	+ÆÐELRÆD REX ANGLØ Southern 'B' bust. Lyon, Lincoln A/Winchester A (see BNJ 68, (1998), p. 25).	
		R.	+SÆPINE ON HVNTANDV	
		(1)	SHM 14091–314. Stora Sojdeby, Fole, Gotland hoard (1910f). 'Irregular'. –°	1.80
		(2) (3)*	RJE (H054). Ex Duke of Argyll, Doubleday 170. Rayner (1988). 45° RJE (H044). Baldwin (1985). Cracked. 45°	1.69 1.51
122	Ba	O.	+ÆÐELRÆD REX ANGLO	
		R.	Southern 'B' bust. Lyon, Winchester A. As above.	
		(1)*	Hild. 1393. 90°	1.61
		(2)	SCBI Copenhagen 446. Ahlander hoard (1850). 90°	1.60
			Obverse B was also used by Æthelstan (see die A) at Huntingdon.	
123	Ce	O.	+ÆÐELRÆD REX ANG: Northern 'A' bust. Lyon, Lincoln Cl,	
		R.	+SÆPINE M°O HVNT:	
		(1) (2) (3)*	BM (1958). Ex Baldwin. 90° SHM 8503-124. Gärestad, Edestad, Blekinge hoard (1888). 0° Hild. 1392. 0°	1.37 1.26 1.24

			THE MINT OF HUNTINGDON	111
124	Dg	O. R.	+ÆÐELRÆD REX ANG: Northern 'A' bust. Lyon, Lincoln Cl. Elongated square head. +SÆPINE MΩ⊙ HVNTE:	
		(1)*	SCBI Glasgow 877, 0°	1.33
			Details arrived too late for incorporation into the body of this study of the following coin:	
124A	Dh	O. R.	As above +SEPINE [M]ΩO HVNTE:	
		(1)*	Hild. 1398A. 0°	1.27
125	Ei	O. R.	+ÆÐELRÆD REX ANGLO: London bust. Lyon, London DI. +'SÆPINE MOH HVNTE	
		(1)*	Oslo. Årstad hoard (1836). 180°	1.29
126	Fk	O. R.	+ÆÐELRÆD REX ANGLO South Eastern bust? Lyon, London A. +SÆPINE M'O'N' HVN	
		(1)*	SHM 12447-7. Blommenhov, Flen, Södermanland hoard (1905). 0°	1.19
127	Gm	O.	'+' ÆÐELRÆD REX' ANGL Classified by Dolley as South Western. Lyon, Exeter A.	
		R.	+SÆPINE MO HVNTE	
		(1) (2)*	Lyon collection. Remains of mount. 180° Hild. 1394. 180°	[1.26] 1.19
128	Но	O. R.	+EDELRE[D R]EX ANGLO London bust? Lyon, Norfolk B (see BNJ 68 (1998), p. 39). +SEPINE []VNTD:	
		(1)*	Hild. 1398. Fragment. 0°	[1.10]
			Obverse H is also used by the moneyers Ælfwig of London (Hild. 2105) and Brantinc of Sudbury (Hild. 3644). See <i>BNJ</i> 68 (1998), p. 39 and Plate 5, 9–11.	
129	lq	O.	+ÆDELRÆD R[:]EX ANGLO Small crude bust, alotted by Dolley to London, Lyon, London DI.	
		R.	+SÆPNNE MON HVHET  Blundered reverse (imitative?).	
		(1)*	Hild. 1397. 270°	0.96
			Other references: Grantley 1110, 'S:EPINE ON HVNTANDV'.	
			In Commentationes p. 170, Dolley refers to a die link between Huntingdon and Hertford mints in the Last Small Cross type, discovered by Van der Meer at Stockholm. This has not been traced.	
			CNUT (1016-1035)	
			Quatrefoil type (BMC viii.x; Hild. E)	
			[]o/c indicates the position of the initial cross in the obverse legend. The die-cutting centres and styles are classified according to the analysis of Blackburn and Lyon in 'Regional	

die-production in Cnut's *Quatrefoil* issue', *Anglo-Saxon Monetary History*, edited by M.A.S. Blackburn (Leicester, 1986), pp. 223–72.

# Æthelstan

			Æthelstan	
130	Aa	O. R.	+CNVT REX ANGLOX 12o/c. Thetford Ae. Crown separate from head. +ÆD/LST/AN M/HVN	
		(1)* (2) (3)	RJE (H080). Arnot 191. Probably from 'Cnut' hoard (c. 1993). Crimped. 90° St Petersburg (Inv. 112867). 180° Bergen. Hårr hoard (1894). Cut half penny. 0°	1.46 1.24 [0.64]
131	Вс	O. R.	+CNVT REX ANGLOR 7o/c. Lincoln e. +ÆÐ/STA/N MO/HVN Cross in fourth quarter.	
		(1)*	Grayburn collection. 'Cnut' hoard (c.1993). 90°	0.99
132	Се	O. R.	+CNVT REX ANGLOX 12o/c. Thetford Al. +ÆÐ/LST/ANM/HVN	
		(1)*	RJE (H099). 'Cnut' hoard (c.1993). Ex Baldwin (1998). 0°	0.99
			Ælfnoth	
133	Aa	O. R.	+CNVT REX ANGLOX 12o/c. Thetford Ae. Neckline points to E. +ÆL/FNO/Ð M:/HVN	
		(1)*	Hild, 1225, 270°	1.50
134	Bc	O. R.	+CNVT REX ANGLO'X 12o/c. Thetford Ae. +ÆL/FNO/Ð MT/HVN	
		(1) (2) (3)* (4)	Grayburn collection. 'Cnut' hoard (c. 1993). 180° Williams collection. Probably ex 'Cnut' hoard (c. 1993). 0° Hild. 1226. 270° RJE (H060). Probably from 'Cnut' hoard (c. 1993). Spink (1993). Crimped. 0°	1.48 1.48 1.45
			Other references: Two coins from the 'Cnut' hoard (c.1993) with the reverse c reading were recorded in Australia in 1994.	
135	Bd	O. R.	As above +ÆL/FNO/D MO/HN[]	
		(1)*	Hild. 1224. Pierced and damaged. 180°	[1.34]
136	Се	O. R.	+CNVT REX ANGLOX 12o/c. Thetford Ae (or m). Neckline points to R. +ÆL/FNO/Ð M'/HVN	
		(1)*	RJE (H094). 'Cnut' hoard (c.1993). Ex Dolphin (1997). 180°	1.32
137	Dg	0. R.	+CNVT REX ANGLORI 7o/c. Stamford B. Pellet before and cross behind bust. +ÆL/FNO/Ð MO/HVI	
			Additional pellet in each quarter.	

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		(1)* (2)	RJE (H093). 'Cnut' hoard (c.1993). Ex Baldwin (1997). 135° Hild. 1227. 180°	1.08 1.01
			Æthelweard	
138	Aa	O.	+CNVT REX ANGLO'X	
		R.	12o/c. Thetford Am (or e). +ÆDL/PER/D MO/HVN	
		(1)*	Hild, 1223, 270°	1.41
139	Ва	0.	+CNVT RE+ ANGLO'X 4o/c. Bedford.	
		R.	As above	
		(1)*	Hild. 1222. 0°	1.14
140	Ce	O.	+CNVT RE+ ANGLON 9o/c. Northampton A.	
		R.	+ÆL/POR/D MØ/HVN	
		(1)**	Grayburn collection. 'Cnut' hoard (c. 1993). 0°	1.04
141	Dg	Ο.	+NVEBVTONÆO+N	
		R.	[]o/c. Northampton B. See Anglo-Saxon Monetary History, p. 240 +ÆÐ/ELR/ERÐ/HVN	
		(1)*	RJE (H028).Ex Baldwin (1980). Mislaid.180°	1.01
			Eadnoth	
142	Aa	O.	+CNVT REX ANGLORVM 6o/c. Lincoln e. Pellet by chin (cf. die F).	
		R.	+EA/DNO/Ð M'O/HVN	
		(1)	SCBI Glasgow 897. 270°	1.43
		(2)* (3)	RJE (H115). 'Cnut' hoard (c.1993). Ex Griffin (1999). 0° Grayburn collection. 'Cnut' hoard (c.1993). Ex Myntgalliert,	1.14
			20 May 1995, 505. 90°	1.04
		(4)	Hild. 1229. 180°	1.00
143	Ab	O. R.	As above +EA/DNO/-Ð MO/HVN	
		K.	Pellet within annulet in first and second quarters; pellet in	
			third and fourth quarters.	
		(1)	SCBI Berlin 610. Mgowo hoard (1893). Cracked. 180°	1.03
		(2)*	Hild.1228. 90°	1.02
144	Bc	O.	+CNVT REX ANGLOX	
		R.	12o/c. Thetford Am (or I). +ED/NOD/M'O/HVN	
			Abbreviation mark close to M.	
		(1)	Trondheim. Dronningens Gate hoard (1950). 180°	1.31
		(2) (3)*	SCBI Copenhagen 1270. Ex Brunn 319. 135° (sic) RJE (H100), 'Cnut' hoard (c.1993). Ex Baldwin (1998). 0°	1.26
145	Ce	Ο.	+CNVT RE+ ONGELI	
		R.	Io/c. Northampton A. +ED/NOD/M©⊙/HVN	
		(1)*	Hild. 1237. 180°(?)	

1.23				
146	Dg	Ο.	+ECTNOVN·TARN  7o/c. Northampton B. Pellet before and behind bust. See  Anglo-Saxon Monetary History, p. 240.	
		R.	+EA/DHO/R HO/HVN	
		(1)*	RJE (H092). 'Cnut' hoard (c.1993). Ex Baldwin (1997). Dark toning. $180^{\circ}$	1.11
147	Dh	O.	As above	
		R.	+ED./NO-D/ON H/VNT London late style reverse.	
		(1)*	Hild. 1230. 270°	0.96
148	Ei	Ο.	+CNVT RE+ ON ANGEL	
		n	10/c. Northampton A.	
		R.	+ED/NOD/M 'O/HVN Space between abbreviation mark and M.	
		(1)*	Grayburn collection. 'Cnut' hoard (c. 1993). 270°	1.11
149	Ec	O.	As above	
100000	<u>। कर</u> ात	R.	As above	
		(1)*	Hild. 1236. 180° (?)	1.09
150	Ej	O.	As above	
		R.	+ED/NOD/MΩ/HVN London Ce style reverse.	
		(1)	Gotlands Fornsal. Tingstäde hoard (1966). 90°	1.06
		(2)*	RJE (H086). 'Cnut' hoard (c.1993). Ex Dix and Webb, 24 April	
			1996, 16. 45°	1.05
151	Fk	O.	+CNVT RE+ ANGLORVM	
		R.	6o/c. Lincoln m. Pellet at chin (cf die A). +EA/ĐNO/Đ N'O/NVN	
		(1)*	Hild. 1235. Cracked. 180°	1.07
152	Gm	O.	+CNVT REX ANGLO'	
		R.	7o/c. London Cl. +EA/DNO/Ð HV/NTD	
			London Cm.	
		(1)*	RJE (H090). 'Cnut' hoard (c.1993). Ex Dolphin (List 10 (1996), 34). O°	1.05
		(2)	Hild. 1231. 270°	1.03
153	Gn	O. R.	As above	
			+EA/DNO/Ð HV/HTD	
		(1)*	Hild. 1231A. 270°	1.00
154	Нр	O.	+CNVT REX ANGLORV 7o/c. London Al.	
		R.	+ED/NOD/M'O/HVN	
			Crescent shaped abbreviation mark.	
		(1)*	SCBI Copenhagen 1269. 180°	1.05

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155	Ιr	O. R.	+CNVT REX ANGLORV 5o/c. Lincoln I. +EADNOD/[]N H/VNT London late style reverse.	
		(1)*	SHM 17352-1. Pilgårds, När, Gotland hoard (1874f). 180°	1.05
156	Jj	O.	+CNVT REX ANGLOX	
		R.	12o/c. Thetford Am. +ED/NO-Ð/MΩO/HVN	
		(1)*	RJE (H110). 'Cnut' hoard (c.1993). Ex Vosper (1999). 180°	1.01
157	Kt	O. R.	+CNVT REX ANGLOR 8o/c. London Cl. +EA/DNO/+D ON/H/N	
		(1)*	SCBI Copenhagen 1266. Enner hoard (1849). 90°	0.96
158	Kh	O. R.	As above As above	
		(1)*	SCBI Copenhagen 1271. Enner hoard (1849), 90°	0.95
159	Lu	O.	+CNVT REX ANGLO: 7o/c. London Cl. Four folds to front drapery.	
		R.	+EA/DNO/D MO/HVN- Stamford B style reverse? Two pellets (colon) in fourth quarter.	
		(1)*	RJE (H119). 'Cnut' hoard (c.1993). Ex Griffin (1999). 90°	0.96
160	Μv	O. R.	+CNVT REX ANGLO 7o/c. London Cl. Pellet behind bust. +E/D/NO-D/ON H/NT	
		(1)	SHM 16295-602-160. Djuped, Styrnäs, Ångermanland hoard	
		(2)*	(1919), 90° RJE (H088), 'Cnut' hoard (c.1993), Ex Vecchi, 12 September 1996, 1153, 0°	0.88 0.87
161	Nx	O.	+CNVT[ ]©:	
		R.	7o/c. London C1. +EA/[ ]/[ ]/HV	
		(1)*	Oslo. Brøholt hoard (1867). Cut half penny. 90°	[0.52]
162	Oz	Ο.	+CNVT REX ANGLO 7o/c, London CI. Pellet behind bust.	
		R.	+EAD/NOD/ON N/VNT· Extra pellet in cusps of quatrefoil.	
		(1)*	RJE (H108). 'Cnut' hoard (c.1993). Ex Vosper (1999). 0°	0.85
			Other references: the following reverse readings were recorded from a batch of coins from the 'Cnut' hoard (c. 1993) in Australia in 1994:	
			NVH O M GONG	
			TAVH NO GONDS	
			EADNOÐ ON HVNTDI EADNOD ON HVNT	

164 Bc	1.19 1.09 1.07 1.06 1.02]
R.	1.09 1.07 1.06
164 Bc	1.09 1.07 1.06
70/c. Lincoln m.  R. +FÆ/RÐE/N MO/HVN  (1) SCBI Copenhagen 1272. Kelstrup hoard (1859). 0° (2) Grayburn collection. 'Cnut' hoard (c.1993). 270° (3)* RJE (H101). 'Cnut' hoard (c.1993). Ex Baldwin (1998). 0° (4) KMK 101844–310. Stumle, Alva, Gotland hoard (1989).  Corroded° (5) Hild. 1238. 180°  Other references: a coin from the the 'Cnut' hoard (c.1993) was recorded with reverse reading c in Australia in 1994.  Godleof  165 Ala O. +CNVT REX ANGLO 70/c. London Cl. R. +GoD/LEOF/ON H/VNT  (1) Hild. 1249. 90° (2) SCBI Copenhagen 1281. 180° (3) Stockholm 'X-10'. 90° (4)* RJE (H102). 'Cnut' hoard (c.1993). Ex Baldwin (1998). 90° (5) Oslo. Årstad hoard (1836). 0°  166 A2b O. As above, but with four pellets added behind head, as if intended as a sceptre head. (cf obverse D below). R. +GOD/LIOF/ON H/VN[]	1.07 1.06
R. +FÆ/R ĐE/N MO/HVN  (1) SCBI Copenhagen 1272. Kelstrup hoard (1859). 0° (2) Grayburn collection. 'Cnut' hoard (c.1993). 270° (3)* RJE (H101). 'Cnut' hoard (c.1993). Ex Baldwin (1998). 0° (4) KMK 101844–310. Stumle, Alva, Gotland hoard (1989). Corroded° (5) Hild. 1238. 180°  Other references: a coin from the the 'Cnut' hoard (c.1993) was recorded with reverse reading c in Australia in 1994.  Godleof  165 Ala O. +CNVT REX ANGLO 70/c. London Cl. R. +GØD/LEOF/ØN H/VNT  (1) Hild. 1249. 90° (2) SCBI Copenhagen 1281. 180° (3) Stockholm 'X-10'. 90° (4)* RJE (H102). 'Cnut' hoard (c.1993). Ex Baldwin (1998). 90° (5) Oslo. Årstad hoard (1836). 0°  166 A2b O. As above, but with four pellets added behind head, as if intended as a sceptre head. (cf obverse D below). R. +GØD/LIOF/ØN H;/VN[]	1.07 1.06
(2) Grayburn collection. 'Cnut' hoard (c.1993). 270° (3)* RJE (H101). 'Cnut' hoard (c.1993). Ex Baldwin (1998). 0° (4) KMK 101844–310. Stumle, Alva, Gotland hoard (1989). Corroded° (5) Hild. 1238. 180°  Other references: a coin from the the 'Cnut' hoard (c.1993) was recorded with reverse reading c in Australia in 1994.  Godleof  165 Ala O. +CNVT REX ANGLO 70/c. London Cl. R. +GOD/LEOF/ON H/VNT  (1) Hild. 1249. 90° (2) SCB/ Copenhagen 1281. 180° (3) Stockholm 'X-10'. 90° (4)* RJE (H102). 'Cnut' hoard (c.1993). Ex Baldwin (1998). 90° (5) Oslo. Årstad hoard (1836). 0°  166 A2b O. As above, but with four pellets added behind head, as if intended as a sceptre head. (cf obverse D below). R. +GOD/LIOF/ON H:/VN[]	1.07 1.06
(3)* RJE (H101). 'Cnut' hoard (c. 1993). Ex Baldwin (1998). 0°  (4) KMK 101844–310. Stumle, Alva, Gotland hoard (1989).  Corroded. –°  (5) Hild. 1238. 180°  Other references: a coin from the the 'Cnut' hoard (c. 1993) was recorded with reverse reading c in Australia in 1994.  Godleof  165 Ala O. +CNVT REX ANGLO 7o/c. London Cl. R. +GOD/LEOF/ON H/VNT  (1) Hild. 1249. 90°  (2) SCBI Copenhagen 1281. 180°  (3) Stockholm 'X-10'. 90°  (4)* RJE (H102). 'Cnut' hoard (c. 1993). Ex Baldwin (1998). 90°  (5) Oslo. Årstad hoard (1836). 0°  166 A2b O. As above, but with four pellets added behind head, as if intended as a sceptre head. (cf obverse D below). R. +GOD/LIOF/ON H:/VN[]	1.06
Corroded. –°  Hild. 1238. 180°  Other references: a coin from the the 'Cnut' hoard (c.1993) was recorded with reverse reading c in Australia in 1994.  Godleof  165 A1a O. +CNVT REX ANGLO 7o/c. London Cl. R. +GOD/LEOF/ON H/VNT  (1) Hild. 1249. 90° (2) SCBI Copenhagen 1281. 180° (3) Stockholm 'X-10'. 90° (4)* RJE (H102). 'Cnut' hoard (c.1993). Ex Baldwin (1998). 90° (5) Oslo. Årstad hoard (1836). 0°  166 A2b O. As above, but with four pellets added behind head, as if intended as a sceptre head. (cf obverse D below). R. +GOD/LIOF/ON H:/VN[]	
Other references: a coin from the the 'Cnut' hoard (c.1993) was recorded with reverse reading c in Australia in 1994.  Godleof  165 Ala O. +CNVT REX ANGLO 70/c. London Cl. R. +GOD/LEOF/ON H/VNT  (1) Hild. 1249. 90° (2) SCBI Copenhagen 1281. 180° (3) Stockholm 'X-10'. 90° (4)* RJE (H102). 'Cnut' hoard (c.1993). Ex Baldwin (1998). 90° (5) Oslo. Årstad hoard (1836). 0°  166 A2b O. As above, but with four pellets added behind head, as if intended as a sceptre head. (cf obverse D below). R. +GOD/LIOF/ON H:/VN[]	1.01
recorded with reverse reading c in Australia in 1994.  Godleof  165 A1a O. +CNVT REX ANGLO 7o/c. London Cl. R. +GOD/LEOF/ON H/VNT  (1) Hild. 1249. 90° (2) SCBI Copenhagen 1281. 180° (3) Stockholm 'X-10'. 90° (4)* RJE (H102). 'Cnut' hoard (c.1993). Ex Baldwin (1998). 90° (5) Oslo. Årstad hoard (1836). 0°  166 A2b O. As above, but with four pellets added behind head, as if intended as a sceptre head. (cf obverse D below). R. +GOD/LIOF/ON H:/VN[]	
165 A1a O. +CNVT REX ANGLO 7o/c. London Cl. R. +GOD/LEOF/ON H/VNT  (1) Hild. 1249. 90° (2) SCBI Copenhagen 1281. 180° (3) Stockholm 'X-10'. 90° (4)* RJE (H102). 'Cnut' hoard (c.1993). Ex Baldwin (1998). 90° (5) Oslo. Årstad hoard (1836). 0°  166 A2b O. As above, but with four pellets added behind head, as if intended as a sceptre head. (cf obverse D below). R. +GOD/LIOF/ON H:/VN[]	
70/c. London Cl.  R. +GOD/LEOF/ON H/VNT  (1) Hild. 1249. 90° (2) SCBI Copenhagen 1281. 180° (3) Stockholm 'X-10'. 90° (4)* RJE (H102). 'Cnut' hoard (c.1993). Ex Baldwin (1998). 90° (5) Oslo. Årstad hoard (1836). 0°  166 A2b O. As above, but with four pellets added behind head, as if intended as a sceptre head. (cf obverse D below).  R. +GOD/LIOF/ON H:/VN[]	
R. +GOD/LEOF/ON H/VNT  (1) Hild. 1249. 90° (2) SCBI Copenhagen 1281. 180° (3) Stockholm 'X-10'. 90° (4)* RJE (H102). 'Cnut' hoard (c.1993). Ex Baldwin (1998). 90° (5) Oslo. Årstad hoard (1836). 0°  166 A2b O. As above, but with four pellets added behind head, as if intended as a sceptre head. (cf obverse D below).  R. +GOD/LIOF/ON H:/VN[]	
(2) SCBI Copenhagen 1281, 180° (3) Stockholm 'X-10', 90° (4)* RJE (H102), 'Cnut' hoard (c.1993), Ex Baldwin (1998), 90° (5) Oslo, Årstad hoard (1836), 0°  166 A2b O. As above, but with four pellets added behind head, as if intended as a sceptre head, (cf obverse D below).  R. +GOD/LIOF/ON H:/VN[]	
(3) Stockholm 'X-10'. 90° (4)* RJE (H102). 'Cnut' hoard (c.1993). Ex Baldwin (1998). 90° (5) Oslo. Årstad hoard (1836). 0°  166 A2b O. As above, but with four pellets added behind head, as if intended as a sceptre head. (cf obverse D below).  R. +GOD/LIOF/ON H:/VN[]	1.02 1.00
Oslo. Årstad hoard (1836). 0°  166 A2b O. As above, but with four pellets added behind head, as if intended as a sceptre head. (cf obverse D below).  R. +GOD/LIOF/ON H:/VN[]	1.00
As above, but with four pellets added behind head, as if intended as a sceptre head. (cf obverse D below).  R. +GOD/LIOF/ON H:/VN[]	1.00
as a sceptre head. (cf obverse D below).  R. +GOD/LIOF/ON H:/VN[]	0.89
R. +GOD/LIOF/ON H:/VN[]	
Course in fourth quarter	
Gouge in fourth quarter.	
	0.89
(2)* Grayburn collection. 'Cnut' hoard (c. 1993). 0°	0.89
167 Bc O. +CNVT REX ANGLORV	
7o/c. London Cl. R. +GOD/LIOF/ON H/VNT	
[1] [1]	0.91
AND THE PERSON NAMED IN TH	0.89
	0.88
Other references: a coin from the 'Cnut' hoard (c.1993) was recorded with reverse reading c in Australia in 1994.	
168 Cel O. +CNVT REX ANGLORVI 50/c. Lincoln I.	
R. +GO/DEL/EOF M/O HV (M ligulated to cross).  Small cross in fourth quarter.	
(1) SHM 16181A, B-1003. Snauvalds, Alscog 6, Gotland hoard (1918f). 0°	0.90
	0.90

			THE MINT OF HUNTINGDON	117
169	Ce2	O. R.	As above As above but with a gouge in the fourth quarter, partly obliterating the small cross.	
		(1)* (2)	RJE (H107). 'Cnut' hoard (c.1993). Ex Baldwin (1998). 180° Hild. 1242. 180°	0.91 0.88
170	De2	O. R.	+CNVT REX ANGL'O: 8o/c. London Cl. Sceptre behind bust. As above	
		(1)*	Grayburn collection. 'Cnut' hoard (c.1993), 180°	0.91
171	Ei	Ο.	+CNVT REX ANGLORVM	
		R.	5o/c. Thetford C variety. +GOD/LEOF/ON H/VNT Pellet in fourth quarter.	
		(1)*	Grayburn collection. 'Cnut' hoard (c.1993). 315°	0.59
			A cut half penny with one corner missing (0.39g) at Bergen from the Hårr hoard (1894) reads ] ELE/OFM[, possibly of Stamford.	
			Godrić	
172	Aa	Ο.	+CNVT REX ANGLO' 7o/c. Anomalous. Lincoln m?	
		R.	+GO/DRI/E MO/HVN	
		(1)*	BMC 249. Ex Hodsall and Tyssen. Broken. 0°	1.14
			(Leofric)	
			Other references: Hild. 361, reading +LEOFRIC M DVH (0.84g), alloted to Dunwich by Hildebrand, was reassigned in <i>Anglo-Saxon Coins</i> , p. 177 to 'Huntingdon or Buckingham'. This coin with an Oxford style bust is not considered by the author to originate from Huntingdon.	
173	Aal	Ο.	Man +CNVT REX ANG	
113	Adi	R.	2o/c. Bedford. Group of pellets behind bust? +M/A* N/ON/HV.	
		101	Thetford style reverse?	
		(1)*	SHM - 14091-431. Store Sojdeby, Fole, Gotland hoard (1910f). 180°	1.18
174	Bal	Ο.	+CNVT REX ANGLO: 8o/c. London Al.	
		R.	As above	
		(1)*	Bergen. Hårr hoard (1894). 90°	1.00
175	Ba2	O. R.	As above, but with small gouge at edge of third quarter.	
		(1)* (2)	Grayburn collection. 'Cnut' hoard (c. 1993). 0° RJE (H111). 'Cnut' hoard (c. 1993). Ex Vosper (1999). 0°	1.03 1.08
			Sæwine	
176	Aa	O.	+CNVT REX ANGLORVI 8o/c. London CI.	
		R.	+SÆ/PIN/E MO:/HVN	

			Lincoln style reverse?  Gouge in second quarter partly obliterating a dagger shaped symbol.	
		(1)*	SCBI Copenhagen 1288. Enner hoard (1849). 270°	0.85
			Stanmær	
177	Aa	O.	+CNVT REX ANGLORV 6o/c. Lincoln (or Stamford) m.	
		R.	+STA/NMA/R MO/HVN:	
		(1)	Grayburn collection. 'Cnut' hoard (c. 1993). Ex Myntgalliert, 20 May 1995, 506, 90°	1.11
		(2)	Baldwin (1998). 'Cnut' hoard (c.1993)°	1.06
		(3)*	RJE (H084). 'Cnut' hoard (c. 1993). Ex Baldwin (1995). 90°	1.02
		(4)	Grayburn collection. 'Cnut' hoard (c. 1993). The reverse of this	F-10 X/100
			coin may have been struck from a repaired die. 270°	1.02
178	Bc	O.	+CNVT REX ANGLORVM 50/c. Lincoln (or Stamford) m.	
		R.	+ST/AH[·]I·/ER M/OHV	
			Annulets in each quarter.	
		(1)*	Grayburn collection. 'Cnut' hoard (c. 1993). Ex Myntgalliert, 20 May 1995, 507. 0°	1.11
			20 May 1993, 307. 0	.4.4.4
179	Bd	O.	As above	
		R.	+ST/ANM/ER WO HV. (M ligulated to cross)	
		(1)*	St Petersburg. Lodeinoe Pole (3) hoard (1949), 116. 270°	1.09
180	Be	O.	As above	
		R.	+CT/AN[·]/ER M/O HV	
			Initial letter overpunched? Diagonal limbs of M intercept. In	
			Anglo-Saxon England 4, 160, Smart construes the reverse reading as +STANMER.	
		(1)*	Hild. 1253. 270°	1.04
181	Bf	O.	As above	
		R.	+ZT/ANM/ER M/O HV (M ligulated to cross)	
			Pellets in the fold of each quarter.	
		(1)*	RJE (H104). 'Cnut' hoard (c.1993). Ex Baldwin (1998). 90°	0.94
182	Cg	O.	+CNVT REX ANGLORVM: 6o/c. Lincoln m.	
		R.	+ST/ANM/ÆR M/O HVN/ (N ligulated to cross)	
		(1)*	RJE (H085). 'Cnut' hoard (c.1993). Ex Finn (1996). 270°	1.11
			Thurcetel	
183	Aa	O.	+CNVT REX ANGLORVM	
		R.	6o/c. Stamford B. +ĐVR/CETL·/ON N/VNT	
		200	London late style reverse.	
			Gouge in third quarter.	
		(1)	Oslo. Årstad hoard (1836). 0°	0.95
		(2)*	Lyon collection. 'Cnut' hoard (c. 1993). 90°	0.93
		100	CONTRACTOR OF STREET STREET, STREET STREET STREET STREET STREET STREET STREET STREET	

			THE MINT OF HUNTINGDON	119
184	Ab	O. R.	As above [+ĐVR]/C[ET]:L/ON H/VNT London style reverse. Gouge in second quarter touching horizontal of cross. Additional pellet in third quarter.	
		(1)*	Trondheim. Dronningens Gate hoard (1950). 270°	0.79
185	Bc	O.	+CNVT REX ANGL- 7o/c, London Cl.	
		R.	+ĐVR/CETL/ON H/ VNT Gouge in second quarter, touching upright of cross.	
		(1)*	Grayburn collection. 'Cnut' hoard (c.1993). 180°	0.93
186	Ce	O.	+CNVT REX ANGLORI 8o/c. London Cl. Pellet behind bust.	
		R.	+DVR/CTEL/ON H/VNT Gouge in third quarter with small pellet to dexter.	
		(1) (2)*	Grayburn collection. 'Cnut' hoard (c.1993). 90° RJE (H098). 'Cnut' hoard (c.1993). Ex Baldwin (1998). 90°	0.89 0.88
			Wulfric	
187	Aa	O. R.	+CNVT REX ANGL·O; 8o/c. London Cl. Pellet behind bust. +PVL/FRIC/O HV/NTN London Cm style reverse.	
		(1)*	RJE (H103). 'Cnut' hoard (c.1993). Ex Baldwin (1998). 180°	0.89
188	Ab	O. R.	As above +PVL/FRIC/ON H/VNTI	
		(1)*	SCBI Berlin 611. 0°	0.81
			A cut quarter penny at Stockholm (SHM 16295-684-161 (0.35g) from the Djuped, Styrnäs, Ångermanland hoard (1919)) of London late style with a reverse reading JM VN[ could conceivably be of Huntingdon but no die links have so far been found.	
			Pointed Helmet type (BMC xiv, Hild. G)	
			The bust styles are based on the classification by Dolley and Ingold (Commentationes, 187–222).	
			Ada	
189	Aa	O. R.	+CNVT R/EX AN Bust IIIc. +ADE ON HVNTV·N	
		(1)*	Hild. 1220. 0°	0.96
			(Ælfsige)	
			Other references: Both Carlyon-Britton 546 (pt) and Lockett 3761 (pt) included a coin purportedly reading '+ÆLFSIGE ON HVNDEN'. Neither the coin(s) nor illustrations have been traced. A moneyer 'Aelsige' is recorded at London in the Small Cross type (Hild. 1981).	

			Eadnoth	
190	Aa	O.	'+' CNVT R' /EX ANGL Bust IIIc.	
		R.	+EADNO-D:O HVNTED	
		(1) (2)*	BM (1915). Ex Morgan (Evans). 0° Hild. 1221, 270°	1.11 1.08
		(3)	SCBI Glasgow 915. 180°	1.07
		(4)	Hild. 1234. 180°	1.06
		(5)	RJE (H067). Ex Glendining, 11 October 1993, 254 (pt). 180°	1.06
		(6)	St Petersburg (Inv. 83561). 180°	1.06
		(7) (8)	SCBI Copenhagen 1262, 180° SCBI Copenhagen 1263, 270°	1.05 1.05
		(9)	Grayburn collection. 'Cnut' hoard (c.1993). 270°	1.04
		(10)	SCBI South-Eastern Museums 1060, Norris Museum, St Ives.	(4,92,5)
		100-200	Ex Glendining, 11 October 1993, 255 (withdrawn). 180°	1.01
		(11)	SHM 6620-72. Äspinge, Hurva, Skåne hoard (1880f). Cut	THE PROPERTY.
			half penny. 180°	[0.50]
191	Ab	O.	As above	
		R.	+EADNOĐ ⊙ HVNTE:	
		(1)*	SCBI Copenhagen 1268. Lübeck hoard (1875). 0°	1.06
		(2)	Hild. 1233. 0°	1.05
192	Bb	O.	+CNVT/RECX AN	
		R.	Bust IIa. As above	
		IX.	As above	
		(1)	RJE (H068). Ex Glendining, 11 October 1993, 254 (pt). 0°	1.12
		(2)	SCBI Copenhagen 1267. Lübeck hoard (1875). 270°	1.09
		(3)	SHM 16295–286–311. Djuped, Styrnäs, Ångermanland hoard (1919). 0°	1.08
		(4)	SHM 16295-229-310. Djuped, Styrnäs, Ångermanland hoard	1.135.70
			(1919). 90°	1.07
		(5)	Arnot 213°	1.07
		(6)* (7)	Hild. 1232. 270° SHM 8503–185. Gärestad, Edestad, Blekinge hoard (1888). 270°	1.07 1.06
		(8)	Gotlands Fornsal, Gandarve, Alva, Gotland hoard (1952f). 270°	1.05
		(9)	SHM 16295-205-309. Djuped, Styrnäs, Ångermanland hoard	
			(1919). 0°	1.04
		(10)	SHM 16295–179–308. Djuped, Styrnäs, Ångermanland hoard (1919). 270°	1.02
			Other references: Talbot Ready, 133. Two coins from the 'Cnut'	
			hoard (c. 1993) were recorded in Australia in 1994 with the	
			following reverse readings 'EADNOD ON HVNTE' and 'EADNOD	
			ON HVNT'.	
			Godleof	
193	Aa	O.	+CNVT:/REX ANG:	
		-	Bust IIIc	
		R.	+GOD'EL'EOF:ON HVNT	
		(1)	SCBI Berlin 684. 180°	1.13
		(2)*	Hild. 1246. Pierced. 180°	[1.10]
194	Ab	Ο.	As above	
		R.	+GODEL* A-D:ON HVNTE	
		(1)	Hild, 1239, 180°	1.07
		(2)	St Petersburg (Inv.83562). 270°	1.06

			THE MINT OF HUNTINGDON	121
		(3) (4) (5)*	Oslo. Årstad hoard (1836). 0° SCBI Copenhagen 1274. 180° SCBI Copenhagen 1273. Kelstrup hoard (1859). 0°	1.03 1.02 1.01
195	Ac	O. R.	As above +'GODELEOF: ON HVNT	
		(1)*	Hild. 1247. 90°	1.00
196	Be	Ο.	+CNVT:/RECX: Bust IIa.	
		R.	+GODL'EOF ON HVNT	
		(1) (2) (3) (4) (5)* (6) (7) (8) (9)	SHM 8503–186. Gärestad, Edestad, Blekinge hoard (1888). 180° SCBI Estonia 684. Maidla hoard (1974). 180° Hild. 1251. 270° Oslo. Årstad hoard (1836). 270° RJE (H112). 'Cnut' hoard (c.1993). Ex Vosper (1999). 270° Hild. 1251. var. 270° SCBI Copenhagen 1282. 270° Lund. Börringekloster, Börringe, Skåne hoard (pre 1892). –° SHM 6620–74. Äspinge, Hurva, Skåne hoard (1880f). Cut half penny. 270°	1.10 1.09 1.08 1.08 1.07 1.05 1.04 1.01
197	Ce	Ο.	+CNVT:/R·EX ANG	
		R.	Bust IIIc. As above	
		(1)* (2)	RJE (H006). Ex Baldwin (1978). 0° BMC 250. Cracked. 0°	1.08 1.07
198	Ch	O. R.	As above +* GODL* EOF: ON H.V.NT	
		(1)* (2)	SCBI Copenhagen 1279. Kelstrup hoard (1859). 180° SCBI Copenhagen 1280. Haagerup hoard (1943). 90°	1.07 0.98
199	Dli	O.	+CNVT/RECX A  Bust II (or III)c. Foot of A touches limb of initial cross.  +GOHELEOE ON HVN  First H overstruck by D?	
		(1)*	Hild. 1241.0°	1.06
200	D2i	O. R.	As above, with pellet by forehead. As above	
		(1) (2)*	SHM – 14091–535. Stora Sojdeby, Fole, Gotland hoard (1910f). 0° RJE (H069). Ex Baldwin (1994). 270°	1.14 1.13
201	Dlj	O. R.	As above +GODELEOF ON HVN	
		(1) (2) (3) (4)* (5) (6) (7)	SCBI Berlin 685, 90° Gotlands Fornsal, Gandarve, Alva, Gotland hoard (1952). 0° SCBI Copenhagen 1277, 0° RJE (H116). 'Cnut' hoard (c. 1993). Ex Griffin (1999), 90° SCBI Copenhagen 1276. Store Valby hoard (1839). 0° KMK 0–19 = 711–478–1999 (Halsegarde). –° SHM 6620–73. Äspinge, Hurva, Skåne hoard (1880f). Half penny fragment. 0°	1.06 1.05 1.05 1.05 1.02 1.02
202	Ei	O.	+CNVT/RECX A Bust IIIc. Gap between A and initial cross. As above	

122			THE MINT OF HUNTINGDON	
		(1)* (2)	RJE (H118). 'Cnut' hoard (c.1993). Ex Baldwin (1999). 180° SCBI South-Eastern Museums 1061, Museum of London.	1.01
		(3)	City hoard (1872). 270° SCBI Copenhagen 1275. Cracked. 180°	1.00 [0.89]
203	Ej	O. R.	As above As above	
		(1) (2)*	Hild. 1244. 180° Glendining, 11 October 1993, 256. –°	1.06 1.03
204	Fk	O. R.	+CNVT / RECX A: Bust IIb. Sceptre head opposite tip of nose. +GODLIOF ON HVNTDI	
		(1)* (2) (3)	SCBI Copenhagen 1285. Top of F missing. 90° SCBI Copenhagen 1284. 90° SHM 11945–25. Störlinge, Gärdslosa, Öland hoard (1902). 90°	1.02 0.98 0.98
205	Gm	Ο.	+CNVT / REX AN	
		R.	Bust IIb. +GODLIOF ON HVNT	
		(1) (2)* (3)	Oslo, Årstad hoard (1836), 270° RJE (H114), 'Cnut' hoard (c.1993), Ex Vosper (1999), 0° Oslo, Bröholt hoard (1867), Fragment, 90°	1.04 0.99 [0.59]
206	Gk	O. R.	As above As above	
		(1)* (2)	SCBI Copenhagen 1286. Monksjorup hoard (1829). 180° Bergen. Nesbø hoard (1891). Fragment. 180°	1.01 [0.51]
207	Но	O.	+: CNVT R/EX AN· Bust IIIc (or b). +GODEL-ADL-AD O HVN Blundered inscription.	
		(1)*	RJE (H109). 'Cnut' hoard (c.1993). Ex Vosper (1999). 270°	1.02
208	Iq	O.	'+' CNVT R/EX AN Bust IIIc.	
		R. (1)*	+GODELEOF ON HVTD  St Petersburg (Inv. 113576). 90°	1.01
209	Js	O.	+CNVT: / REX AN	1.01
207	33	R.	Bust IIIc. Pellet behind neck.  +- GODEL' FOF ON HV	
		(1)*	Hild. 1243. 0°	1.00
210	Ji	O. R.	As above As above	
		(1)*	Oslo. Årstad hoard (1836). 270°	0.98
211	Ku	O. R.	+CNVT /EX ANG: Bust IIIc. +GO'DEL'FOF ON HVT:	
				0.00
		(1)*	RJE (H113). 'Cnut' hoard (c.1993). Ex Vosper (1999). 270°	0.99

			THE MINT OF HUNTINGDON	123
212	Lw	Ο.	+CNVT / REX A Bust IIIc.	
		R.	+GODLEOF ON HV	
		(1) (2)*	Hild. 1250. 270° Grayburn collection. 'Cnut' hoard (c.1993). 0°	0.98 0.98
213	Му	О.	+CNVT / RECX A: Bust IIb. Sceptre head above tip of nose.	
		R.	+GODEL EOF ON H[H]T	
		(1) (2) (3)*	Stockholm. No provenance, 90° SCBI Copenhagen 1278, 90° Hild, 1240, 0°	0.92 0.89 0.87
214	Nz	O.	T:CNVT / REX A	
		R.	Bust IIIb. +GODLEOF ON HVN	
		(1)* (2)	RJE (H091). 'Cnut' hoard (c.1993). Ex Dolphin (1997). 90° Grayburn collection. 'Cnut' hoard (c.1993). 90°	0.89 0.81
			Other references: Brunn 169, 'GODELEOF'. Coins were recorded from the 'Cnut' hoard (c. 1993) in Australia in 1994 with the following reverse readings:  GODL-EOF ON HVNT  GODLLOF ON HVNT  GODELEOF ON HVT (2, 'same dies')  'GODEL-EOF:ON HVNT  GODLEOF ON HV  GODLEOF ON HVN	
			Godman	
215	Aa	O. R.	+CNVT / REX ANG Bust IIIc. GODEMAN ON HVN	0.77
		(1)*	Hild. 1248. 270°	95.67
			Godric	
216	Aa	O.	+*C-NVT / R-ECX A::	
		R.	Bust IIb. +GOFRIC ON HVHDT	
		(1)*	SCBI Copenhagen 1287. Lübeck hoard (1875), 90°	0.88
			Leofric	
217	Aa	O.	+CNVT:/EX AN[] Bust IIb. Crude workmanship.	
		R.	+LIOFRIC ON HVN[T]	
		(1)*	SHM 11300-143. Mannegårda, Lye, Gotland hoard (1900). 0°	0.92
			Leofwine (so classified in Numismatiska Meddelanden XXXV, p. 75, but as Steorwine in Commentationes, p. 209).	
218	Aa	Ο.	+CNVT / RECX A Bust IIb. Crude workmanship.	
		R.	+LTEOCPINE O HVN:	
		(1) (2)*	SHM 23695–75. Rossvik, Nora, Ångermanland hoard (1946). $0^{\rm o}$ Hild. 1252. $180^{\rm o}$	0.84 0.77

124			THE MINT OF HUNTINGDON	
219	Ba	O.	+CNVT / RECX A:	
		R.	Bust IIb. As above	
		(1)*	BMC 251. Wedmore hoard (1853). 0°	0.76
220	Ce	O.	+CNVT / RECX AI Bust IIIc.	
		R.	+LEOFPINE ON HVN[]	
		(1)*	Trondheim. Dronningens Gate hoard (1950), 0°	0.86
			Wynsige	
221	Aa	O.	+CNVT:/ RE·X AN Bust Ilb.	
		R.	+PYNSIGE:O VNTDNE	
		(1)*	BMC 252. Ex Miles (1820). 0°	0.99
			Short Cross type (BMC xvi, Hild. H.)	
			Ada	
222	Aa	O. R.	+CNV-/-T RECX +ADA-ON HVNTED:	
		(1) (2)*	Dolphin (List, September 1998, 34). 'Cnut' hoard (c.1993)° RJE (H089). 'Cnut' hoard (c.1993). Ex Vecchi, 12 September	1.18
		(3)	1996, 1166. 0° Hild. 1219. 270°	1.14
		(4)	Dolphin (1993). 'Cnut' Hoard (c. 1993)°	1.13
		(5) (6)	Griffin (1999). 'Cnut' hoard (c.1993). 270° Vosper (1999). 'Cnut' hoard (c.1993). –°	1.13
		(7) (8)	St Petersburg (Inv. 83563). 270° Grayburn collection. 'Cnut' hoard (c. 1993). Myntgalliert, 20 May	1.13
			1995, 503. 270°	1.12
		(9) (10)	Williams collection. 270°  SCBI Copenhagen 1260, 270°	1.12
		(11)	SCBI Copenhagen 1261. 90°	1.10
		(12) (13)	Baldwin (1998). 'Cnut' hoard (c. 1993)° Dolphin (List 4, Summer 1993, 5067). 'Cnut' hoard (c. 1993)°	1.09 [-]
		(14)	Metal detector find, 'Kent/Surrey borders' (1991). Fragment °	[1.10] (sic)
223	Вс	O. R.	+CNV /T·REC'X: +ADA· ON HVN·TED:	
		(1)*	SCBI Copenhagen 1259. Lübeck hoard (1875). 0°	1.14
224	200	0	Ælfgar +CNVT /·R·ECX:	
224	Aa	O. R.	+ÆL-FGAR ON HVNT	
		(1) (2)	RJE (H081). 'Cnut' hoard (c.1993). Ex Arnot 231. 270° SCBI South-Eastern Museums 1086, Norris Museum, St Ives. 270°	1.17 1.13
		(3)	SCBI Copenhagen 1264. 0°	1.11
		(4)* (5)	Griffin (1999), 'Cnut' hoard (c.1993), 180° SCBI Copenhagen 1265, 90°	1.11
		(6)	SCBI South Eastern Museums 1087, Norris Museum, St Ives.	
		(7)	Glendining, 11 October 1993, 257 (withdrawn). 180° Grayburn collection. 'Cnut' hoard (c. 1993). Myntgalliert, 20 May	1.09
		6.0	1995, 504. 270°	1.09

			THE MINT OF HUNTINGDON	125
			Other references: a coin from the 'Cnut' hoard (c. 1993) was recorded in Australia in 1994 with reverse reading a.	
225	Вс	O. R.	+[N]FII/RCICI+N +ÆCIGAR ON HVNT	
		(1)*	BM (1960). Ex Lockett 3765 (pt). 90°	1.00
			Other references; Talbot Ready, 141; Brunn 175, 'ÆLFGAR ON HVN[T]'.	
			Wulfstan	
226	Aa	O. R.	+CNVT / R'EC'X: Sceptre by bridge of nose. +PVLSTAN ON HVN'	
		(1) (2) (3) (4) (5)*	Grayburn collection. 'Cnut' hoard (c. 1993). 270° Stockholm. Radimöis hoard (1904)? 270° Griffin (1999). 'Cnut' hoard (c. 1993). 270° Vosper (1999). 'Cnut' hoard (c. 1993). –° RJE (H105). 'Cnut' hoard (c. 1993). Ex Baldwin (1998). 270°	1.16 1.14 1.14 1.11 1.10
			Other references: a coin was recorded from the 'Cnut' hoard $(c.1993)$ in Australia in 1994 with the reading Aa.	
227	Ab	O. R.	As above +PVLSTAN ON HV	
		(1) (2)*	SHM 11300–172. Mannegårda, Lye, Gotland hoard (1900). 0° RJE (H016). Stuttgart, 9 June 1978. 90°	1.12 1.08
228	Ba	O. R.	+CNVT / ·RECX Sceptre by tip of πose. As above	
		(1) (2)* (3)	Hild. 1254. Broken. 180° Grayburn collection. 'Cnut' hoard (c. 1993). 0° KMK 102449 – 371–1447. Lilla Klintegårde, Väskende, Gotland hoard (1989). –°	1.19 1.14 1.12
			Wulfwine	
229	Aa	O. R.	+CNV /:T RECX [A]. +PWLFPINE OH HVT	
		(1) (2)* (3)	SHM 11619–63. Garde, Stenkyrka. Gotland hoard (1902). 180° RJE (H106). 'Cnut' Hoard (c.1993). Ex Baldwin (1998). 90° SCBI Copenhagen 1290. 90°	1.00 0.97 0.84
230	Ba	O. R,	+CNV/T REX: As above	
		(1)*	Grayburn collection. 'Cnut' hoard (c.1993). Myntgalliert, 20 May 1995, 508. 90°	0.91
231	Ca	O. R.	+CNV/T REX :: As above	
		(1)*	SCBI Copenhagen 1289. Kongsø plantage hoard (1904). 90°	0.82
232	Ce	O. R.	As above +PVL'FINE ON HVNT :	
		(1)*	RJE (H117). 'Cnut' hoard (c.1993). Ex Griffin (1999). 180°	0.92

			Other references; a coin was recorded from the 'Cnut' hoard (c.1993) in Australia in 1994 with the obverse reading 'CNV.T R' and reverse 'PVLFPINE ON HVT'.	
			HAROLD I (joint king 1035–1037, sole king 1037–1040)	
			Jewel Cross type (BMC i, Hild. A)	
			The busts are classified according to T. Talvio, 'Harold I and Harthacnut's Jewel Cross type reconsidered', <i>Anglo-Saxon Monetary History</i> , pp. 273–90.	
			Wulfwine	
233	Aa	Ο.	+HARO / LD RE·X :: Variety L1 B'. Close folds at dexter shoulder.	
		R.	+PVLFPINE ON HVNTAN	
		(1)*	Hild. 314. See <i>SCBI</i> Stockholm 236, where the coin is mistakenly described as from the same obverse die as the preceding coin, Stockholm 235, of the moneyer Wulfsige at Hereford. 270°	1.08
234	Ab	O.	As above	
		R.	+P.VL·FPINE ON HVNT ::	
		(1) (2)*	SCBI Copenhagen 177, 180° Hild, 313, SCBI Stockholm 237, 90°	1.04 1.00
		(3)	St Petersburg (Inv. 112944). 270°	1.00
235	Bb	O.	+HARO/LD RE.X:	
		R.	Variety L1'B'. Widely spread folds at dexter shoulder. As above	
		(1)*	BM (1898). Ex 5 Montagu 196 (pt). 0°	0.97
236	Ce	Ο.	+HAR·/ OLD REX Variety L2'B'. Not recorded by Talvio for mint.	
		R.	+PALFPINE ON HV (first V inverted as A)	
		(1)*	RJE (H096). Ex Baldwin (1997). Edge cracked, 90°	0.96
			Fleur-de-lis type (BMC v, vi, and Hild. B)	
			Wulfwig	
237	Aa	O. R.	+HAROLD / RECX [E]N: +PV/LFPI/ ON H/VNT:	
		(1)* (2)	Hild. 312. SCBI Stockholm 885. 90° SHM 6620/-, Äspinge, Hurva, Skåne hoard (1880f). Cut half penny. 90°	[0.58]
238	Ab	O. R.	As above +PV/LPII/ ONH/VN:	
		(1) (2)*	Hild. 743 (allotted to London). SCBI Stockholm 886. 0° BM (1898). 180°	0.98 0.97
239	Вс	O. R.	+HAROL/D RECX A +PVL/FPII/ ON H/VNT	
		(1)*	Oslo. Brøholt hoard (1867). 90°	1.10

			THE MINT OF HUNTINGDON	127
240	Вb	O. R.	As above As above	
		(1)* (2)	Hild. 742 (allotted to London). SCBI Stockholm 887. 90° Hild. 742 (duplicate). SCBI Stockholm 888. 270°	0.89 0.82
241	Се	O. R.	+HAROL/D RX[ ] +PV/LPII/ ON N/VNT	
		(1)*	St Petersburg. Lodeinoe (3) hoard (1949) 311. 180°	0.94
			Wulfwine	
242	Aa	O. R.	+HAROL/D[ ] Sceptre head by forehead. +PV/(RIM/E ON / HVT First N liquidated to cross	
			+PV/LPIN/E ON / HVT First N ligulated to cross.	0.06
		(1) (2)* (3)	SCBI Berlin 36. Juura/Odenpäh hoard (1888). 180° SCBI Copenhagen 178. Kongsø plantage hoard (1904). 270° KMK 6200/–. Åspinge, Hurva, Skåne hoard (1880f). The reverse die is a, the obverse less certainly A. Cut half penny. 270°	0.96 0.94 [0.50]
243	Вс	O.	+HAROL/D RECX [∵] Sceptre head by nose.	
		R.	+PV/LPN/E ON-/HVN	
		(1) (2)*	Hild. 315. SCBI Stockholm 884. 180° RJE (H039). Metal detector find at Titchmarsh, Northants (1982). Earlier finds from the same spot were auctioned at Sotheby,	0.94
		(3)	16 April 1980, 420–5. Ex Green (1983). Corroded, 180° SCBI South-Eastern Museums 1112, missing from Norris	[0.85]
			Museum, St Ives. –°	[-]
			Other references: Carlyon-Britton 1094, '+HAROLD RECX', +PVLPNE ON HVN'. Possibly same coin as missing from Norris Museum.	
			HARTHACNUT (joint king 1035-1037, sole king 1040-1042)	
			Arms and Sceptre type (BMC ii, Hild. B)	
			Ælfwine	
244	Aa	O. R.	+HAR:/CNVTT +Æ·LFPINE ON HVNT	
		(1)*	Hild. 69. SCBI Stockholm 1625. Probably from the Findarve,	1,17
		(2)	Rone (not Rome), Gotland hoard (1843), 180° Hild, 69 (duplicate), SCBI Stockholm 1626. Probably from the above hoard, 180°	1.11
			Wulfwig	
245	Aa	O. R.	+HAR:/ÐACN/ +PVLFPJ ON HVNTA	
		(1)*	Carlyon-Britton 1103 (Plate XXVI). Ex Brice, 2 Montagu 108 (Plate I) and Murdoch 149°	[ - J
			Wulfwine	
246	Aa	O. R.	+HAR:/DCN/T +PVLFPIN:E ON NV (wedge)	

128			THE MINT OF HUNTINGDON	
		(1)*	Hild. 73 (under Langport). SCBI Stockholm 1627 (as Huntingdon). Äspinge, Hurva, Skåne hoard (1880f). 270°	1.17
247	Ab	O. R.	As above +PVLFPIN·E ON HVN	
		(1) (2)* (3)	SCBI Copenhagen 644. Haagerup hoard (1943) 560 ('sic!'). Bent. 270° SCBI Copenhagen 643. Brahetrolleborg hoard (1948). 90° SCBI South-Eastern Museums 1121. Norris Museum, St Ives (missing). Broken, repaired and set in silver collet. Find reference on photograph taken by Christopher Blunt in 1958 is illegible. 90°?	1.11 1.08
			Arms and Sceptre type inscribed 'Cnut' (BMC xvii, Hild. I)	
			Ælfwine	
248	Aa	O. R.	+CNVT / RECX. +.ÆLFPINE ON HVNT	
		(1)*	BM (1952). Cracked 270°	1.02
			(Wulfstan)	
(249)	Aa	O. R.	+CNVT / RECX: +PVLSTAN ON [HVN]	
		(1)	SCBI Copenhagen 1291. 180°	1.10
			EDWARD THE CONFESSOR (1042–1066)	
			PACX type (BMC iv, Hild. D)	
			Wulfwig	
250	Aa	O. R.	+EDPERD/-REX A +PV/L [F]II/ONV/NTA-	
		(1)* (2)	Hild. 243. 270° SHM 6620–92. Äspinge, Hurva, Skåne hoard (1880f). Cut quarter penny. –°	[0.26]
251	Ab	O. R.	As above +PV/L·FII/ON N/VNT	
		(1)*	RJE (H058). Ex Spink (1990). 0°	0.96
252	Ac	O. R.	As above +PV/L·FI/ON V/NTA	
		(1)*	SCBI Copenhagen 902. Tørring hoard (1830). 90°	0.90
253	Bd	O. R.	+EDPA/D REX +PV/L·F[P]/I ON/VNT Irregular reading PSCX.	
		(1)*	SCBI South-Eastern Museums 1132, Norris Museum, St Ives. 90°	1.00
254	Ве	O. R.	As above +PV/L·FP/I ONN/VNT Irregular reading PSCX.	
		(1)*	RJE (H025). Ticketed 'Montagu' (see below). Ex Baldwin (1980). 180°	0.90

Other references: 1 Montagu 831 (pt), '+PVLFPI ON VNT'; 2 Montagu 135 (pt), '+PVLFPI ON HVNT'. Given the readings, coin Be (1) must be Montagu 135 and Bd (1) is possibly Montagu 831. A PACX penny in the collection of the Very Rev. H.R. Dawson, Dean of St Patrick's College, Dublin, read as +EDPAR', +PV/LFP/I ONI/VNT' was dispersed through Sotheby in 1842.

### Wulfwine

			Wulfwine	
255	Aa	O. R.	+EDPA/RD REX +P.V./LFP/INE O HVN	
		(1) (2)*	BMC 560. City of London hoard (1872), 0° SCBI Copenhagen 905. Tørring hoard (1830), 0°	1.05 1.05
			Radiate-Small Cross type (BMC i, Hild. A)	
(-)			(Dunwig)	
			Listed by Peter Seaby in 'The Sequence of Anglo-Saxon Coin Types, 1030–50', BNJ 28 (1955), 111–46 at p. 141, but not authenticated.	
			Wulfwig	
256	Aa	O. R.	+EDPA <sup>-</sup> /R'D REX +PVLFPIG ON HVNT:	
		(1) (2)*	BMC 555. 180° RJE (H070), Ex Baldwin (1994). 270°	1.08 0.95
257	Ba	O. R.	+EDER:/D REX A: As above	
		(1)*	SCBI Copenhagen 906. 270°	1.07
			Wulfwine	
258	Aa	O. R.	+EDPER/D RE+ :: +PVLFPINE ON HVTNE	
		(1) (2)*	SCBI Copenhagen 903, 180° Hild, 244, 180°	1.16 1.06
(259)	Вс	O. R.	]R"/DRE[X][ ][V]LFPINŒ[	
		(1)*	SCBI Copenhagen 904. Bonderup hoard (1822). Cut half penny. $0^{\circ}$	[0.50]
			This coin is attributed to Huntingdon in the Copenhagen sylloge, although no part of the mint name is showing and no die links have been identified. Wulfwine is also known in the type at Colchester, Hereford, Leicester, London and Southwark.	
			Wulfstan	
260	Aa	O. R.	+EDPER/D REX A +PVLSTAN ON HVNTE	
		(1)* (2)	SCB1 Copenhagen 907. Bonderup hoard (1822). 270° SHM 11300 – 240. Mannegårde, Lye, Gotland hoard (1900). 270°	1.13 1.12

130			THE MINT OF HUNTINGDON	
45.0040			Trefoil Quadrilateral type (BMC iii, Hild, C)	
			Ælfwine	
261	Aa	O. R.	+EDPERD/·REX A +ÆL-FPINE OH HVNTE Extra pellet in first and fourth quarter.	
		(1) (2)* (3) (4) (5) (6) (7) (8)	SCBI South-Eastern Museums 1155, Museum of London. City of London hoard (1872). 0°  BMC 559. 90°  Baldwin, 4 May 1999, 444 (illustrated). 0°  Doubleday 171. Ex Carr 122. 90°  RJE (H026). Ex Carlyon-Britton 1108, Lockett 3792 (pt).  Baldwin (1980). 0°  BM (details provided 21 May 1987). Fragment. 0°  Pheatt 582 (illustrated). Cut half penny. –°  BM (photographs provided in 1987). Cut half penny reading  O. +EDPE[ ]EX A  R. +AEL-F[ ]NTE. –°	1.12 1.11 1.11 1.10 0.89 [0.59]
262	Ab	O. R.	As above +FL-FPINE ON HVNT: Extra pellets in trefoils of second and third quarters.	
		(1) (2)*	Arnot 271 (illustrated). Ex Elmore Jones 379. SCBI American Collections 566, Spink, 19 November 1986, 819. 180° SCBI South-Eastern Museums 1156, Norris Museum, St Ives.	1.13
		80%	Glendining, 11 October 1993, 259 (withdrawn). Catalogued as 'Leofric'. 180°	1.10
263	Ba	O. R.	+:E:D'PE:/ RD REX As above	
		(1)* (2)	Baldwin, 12–13 October 1998, 1315 (illustrated). –° RJE (H033). Ex Baldwin (1981). Cut half penny. Joined (when acquired by Baldwin) with another cut half penny not of Huntingdon. 90°	[0.51]
			Uncertain moneyer	
(264)	Aa	O. R.	]ED:/[ ]HV[T][	
		(1)*	SCBI South-Eastern Museums 1165, Norris Museum, St Ives. Cut quarter penny. 0°	[0.21]
			Although listed in the sylloge as from an 'uncertain mint', Huntingdon appears to be intended.	
			Other references: 2 Montagu 133 (pt), '+ÆLFPINE ON HVNT'; Moon 34; Crowther 47 and Walters 115 (pt); Wheeler 1056. BCH, p.93, City of London hoard (1872), 'Ælfwine, 1; uncertain moneyer 1.'	
			Small Flan type (BMC ii, Hild. B)	
			Ælfwine	
265	Aa	Ο.	+EDPE/RD REY Pellet on neck.	
		R.	+ÆLFPINE ON HV	
		(1) (2)	BMC 556. Thwaite hoard (1832). 180° Private collection. Ex Elmore Jones 380 (illustrated),	I.11

			THE MINT OF HUNTINGDON	131
		(3)* (4) (5) (6) (7)	Glendining, 24 March 1977, 341, Baldwin (1978), RJE (H013), Baldwin (1980). 180° RJE (H002). Ex Baldwin (1977). 90° Pheatt 588 (illustrated). –° SCBI Copenhagen 901. Haagerup hoard (1943). Broken. 180° Dolphin (List 7, Summer 1995, 167 (illustrated)). –° BMC 558. Thwaite hoard (1832). Cut quarter penny. 270°	1.11 1.11 0.99 0.96 [-] [0.27]
			Other references: Bliss 118 (pt), '+ÆLFPINE ON HV'; Carlyon-Britton 1776 (pt), '+ÆLFPINE ON HV'. NC, New Series, 16 (1876), 323–94 at p. 351, records two coins from the City of London hoard (1872) reading 'E[ ]NG ON HV'.	
			(Liofwine?)	
(266)	Aa	O. R.	+EDP∵ARD RC +LiOF[P]INE ONIV (or NIY) Huntingdon or Hythe.	
		(1)*	BMC 568. 180°	0.91
			Ulfcetel	
267	Aa	O. R.	+EDPA-/D RE +VLFCTL ON HVNT	
		(1)* (2)	RJE (H052). Ex Duke of Argyll, Doubleday 172. Baldwin (1987). $0^{\circ}$ BMC 557. $0^{\circ}$	0.87 0.63
			Other references: Berge 276 (pt), 1 Montagu 827 (pt), 'ex Brice', Grantley 1190 (pt), '+VLFCTL ON HVNT'. BCH p. 92, City of London hoard (1872), 'uncertain moneyers, 2'.	
			Expanding Cross type (BMC v, Hild. E)	
			Struck as light and heavy issue.	
			Ælfwine	
268	Aa	0.	+EDPER:/-D REX: Sceptre crowded between bust and legend.	
		R.	+ÆLFPINE ON HVNTEN:	
		(1)*	RJE (H082). Ex Elmore Jones 382, <i>N Circ</i> , May 1972, 5345 (illustrated), October 1972, 9249 (illustrated), Arnot 291	
		(2)	(illustrated). Baldwin (1995). 0°  BMC 561. City of London hoard (1872). See North, English  Hammered Coinage I, (London, 1994), Plate 14, 26, 270°	1.69 1.65
269	Ba	O.	+E[ ]EP/REEX: Sceptre well spaced between bust and legend.	
		R. (1)*	As above  Photographs provided by K.A. Jacob (1980). Coin not traced.  Fragment. 270°	[-]
270	Се	O. R.	+EDPII:/RD RE +[Æ]L·FPINE OH ИVN[T] Pellet in first and fourth quarter.	` '
		(1)*	Elmore Jones 381. ~°	1.13
			Other references: 1 Montagu 835 (pt), '+ÆLFPINE ON HVNTEN'. BCH, p. 93, records 'Ælfwine, 1' from the City of London hoard (1872).	

			Godric	
271	Aa	O. R.	+EDPER:/·D·REX: +GODRIC ON HVNTEN	
		(1) (2)*	SCBI South-Eastern Museums 1214, Norris Museum, St Ives. 270° RJE (H017). City of London hoard (1872). Ex Glendining, 14 March 1973, 275 (illustrated), SCMB June 1973, H3626	1.78
			(Plate 41). Broken and repaired. 270°	[1.67]
		(3)	BMC 562. City of London hoard (1872). 270° Appliedons based (1997). MGira May 1998, p. 153.	1.65
		(4) (5)	Appledore hoard (1997). NCirc. May 1998, p.153. –° Doubleday 173. Ex Duke of Argyll (intact coin). Glendining,	1.63
			5 February 1992, 79 (broken). 270°	1.43
		(6)	SCBI South-Eastern Museums 1215, Norris Museum, St Ives. Cut half penny. 270°	[0.87]
		(7)	SCBI South-Eastern Museums 1216, Norris Museum, St Ives.	NES TO
			Cut half penny. 270°	[0.79]
			Other references: Briggs 220 (pt), City of London hoard (1872) (?), see BNJ 47 (1977), p. 73; Carlyon-Britton 597 (pt); 2 Roth 91 (pt): Lockett 2810 (pt); BCH, p.93 recording 'Godric, 3' and 91 (pt): Lockett 2810 (pt); BCH p.93 records 'Godric, 3' and p. 97 (supplementary list) 'Godric'. All described as reading '+GODRIC ON HVNTEN'.	
			Godwine	
272	Aa	O. R.	+EDPNE·/R[ ]RE +GODPIHE ON HVNIN-	
		(1)*	SHM 11300-277. Mannegårde, Lye, Gotland hoard (1900). 0°	1.14
			Pointed Helmet type (BMC vii, Hild. F)	
			Godric	
273	Aa	O. R.	+EDP/D REX +GODRIC ON HVNTE	
		(1) (2)*	Elmore Jones 383, _°  RJE (H083). Ex <i>SCMB</i> June 1955, 7591, Arnot 303 (illustrated). Baldwin (1995). 90°	1.33 1.32
274	Вс	O. R.	+EDPER/D REX +GODRIC ON HVNTE:	
		(1)* (2)	BM (1915). Ex Morgan (Evans). Corroded, 90° Museum of London. City of London hoard (1872). –°	[1.25] [-]
			Other references: 2 Montagu 143 (pt); Carlyon-Britton 1135 (pt); Lockett 3808 (pt), all described as reading '+GODRIC ON HVNTE'. NC, New Series, 16 (1876), p. 351 records three coins, purportedly from two different reverses, reading 'GODRIC ON HVNTEN' from the City of London hoard (1872). BCH. p. 121, also records 'Godric, 1' from the Sedlescombe hoard (1876).	
			Godwine	
275	Aa	O. R.	+EDPER/D REX +GODPINE ON HVNT	
		(1) (2)* (3)	Glendining, 11 October 1993, 261. –°  SCBI South-Eastern Museums 1281, Norris Museum, St Ives. 90°  Vienna. –°	1.33 1.31 [-]

GODPINE ON HVNTE:' from the City of London hoard (1872). Sovereign-Eagles type (BMC ix, Hild. H) Godric 276 Aa O. EDPARD REX AUGLO R. +GODRIC ON/ HV/ITD (1)\*RJE (H053). Ex Duke of Argyll, Doubleday 174. Baldwin (1987). 0° 1.35 Other references: Parsons 202 (pt). Godwine 277 O. EADPARD RE ANGL" Aa R. +GODPINE ON HYNT: (1)\*Hild 242, 180° 1.34 Other references: E.H. Willett in 'Notes on the Sedlescombe find', Collections of the Sussex Archaeological Society, 33 (1883), 20-38, at p. 29, lists the reading 'LLID-ON HVNDON' (sic). See also BCH, p. 121. Under the City of London hoard (1872), BCH, p. 95 lists 'Godwine, 9; Leofwine, 1' as BMC ix, in error for BMC xi. Sovereign-Eagles and Hammer Cross type mule (BMC ix/xi, Hild, H/G) Godwine 278 Aa Q. EA[ND]PA RE+ ANGLO Pellet in field under right arm. R. +GODPINE ON HVHTE Reverse a is from the same die as Godwine Hammer Cross Aa. BM (1971). Ex Lockett 840, Elmore Jones 384, 270° 1.35 (1)\*SCBI South-Eastern Museums 1414, Museum of London. (2)1.32 City of London hoard (1872), 270° Leofwine (Liofwine) 279 O. Aa EADPA R-X [A]NGLO R. +LIOFPINE ON HVNT Reverse a is from the same die as Leofwine Hammer Cross Aa. (1)\*Elmore Jones 385. Ex Carlyon-Britton 1152 (Plate XXVII), Ryan 859 (illustrated), where reading is given as 'LEOFPINE 1.32 (sic) ON HVNT', -° Hammer Cross type (BMC xi, Hild. G) Godric 280 +EADPAR/RD RE Aa Ο. Ř. +GODRIC OH HVNTE: Obverse A is also used by the moneyer Leofwine (Aa), and by

Godric with a Facing Bust reverse (Aa).

Other references; Briggs 234 (pt), City of London hoard (1872) (?),

see BNJ 47 (1977), p. 74; Bliss 118 (pt); Carlyon-Britton 1791 (pt), all described as reading +GODPINE ON HVNT'. NC, New Series, 16 (1876), p. 351 records two coins reading GODPINE ON HVNTE' and NC<sup>3</sup> 5 (1885), p. 265 another reading

(pt); Carlyon-Britton 1156; Roth 82 (pt); Carlyon-Britton 1803 (pt);

			THE MINT OF HUNTINGDON	135
			Talbot Ready 173; Glendining, 24–5 May 1972, 666; NCirc, April 1973, 3107; Glendining, 14 March 1973, 278 (pt). The City of London hoard (1872) is recorded as containing ten coins of Godwine, nine listed by Willett (NC, New Series, 16 (1876), p. 351 and one by Evans (NC <sup>3</sup> , 5 (1885), p. 268. Most of these references give the reading '+GODPINE ON HVNTE'.	
			Leofwine (Liofwine)	
282	Aa	O. R.	+EADPAR/RD RE +LIOFPINE ON HVNT:	
			Obverse A is also used by the moneyer Godric (Aa) and reverse a with a Sovereign-Eagles and Hammer Cross mule, Leofwine Aa.	
		(1) (2)*	BMC 565. Chancton hoard (1866). 270° RJE (H064). Ex Glendining, 11 October 1993, 269 (pt). Baldwin (1993). Cracked. 0°	1.30
			Other references: BCH, p. 95, refers to Leofwine under the Sovereign-Eagles type from the City of London hoard (1872). In BNJ 47 (1977), p. 66 n. 1, this is amended to the Hammer Cross type. A Hammer Cross penny of Leofwine was included by Spink in Anglo-Saxon and Norman mint towns of England: a fixed display of Anglo-Saxon and Norman pennies, now dismantled. See Freeman, The Moneyer and the Mint, p. 283.	
			Hammer Cross and Facing Bust type mule (BMC xi/xiii, Hild. G/Ac)	
			Godric	
283	Aa	O. R.	+EADPAR/RD RE +GODRIC•ON HV•NT	
		(1) (2)*	SCBI South-Eastern Museums 1563, Museum of London. City of London hoard (1872). 270° BM ((1915). City of London hoard (1872). Ex Morgan (Evans). 90°	0.90 0.68
			Other references: there is no mention of this mule in the reports on the City of London hoard (1872).	
			Facing Bust type (BMC xiii, Hild. Ac)	
			(Godric)	
			No Facing Bust penny of Godric has been traced, but one appears to have been offered in Roth 91 (pt), with a reverse reading '+GODRIC ON HVNTE'. NC, New Series, 16 (1876), p. 351, records three coins purportedly from the City of London hoard (1872) reading '+GODRIC ON HVNTEN'.	
			Godwine	
284	Aa	O. R.	EADPARD RE: Pellet above dexter shoulder. +GODPINE: ON HVNT	
		(1) (2)	SCBI South-Eastern Museums 1596, Norris Museum, St Ives. 180° Dolphin (List (November 1997) 76, (September 1998) 42 and (April 1999) 44). Ex Elmore Jones 387, SCMB February 1972 (H 2527, Plate 19), July 1972 (H 3098, Plate 56), December 1972 (H 3393) and March 1973 (H 3483, Plate 17), Glendining,	1.12
		(3)*	19 June 1990, 810, Arnot 344 ° RJE (H046). Ex National Museum of Wales. 270°	1.10 1.09

		(4) (5) (6)	BMC 566. Chancton hoard (1866). Bent. 180° SCBI South-Eastern Museums 1597, Norris Museum, St Ives. 90° Private collection. Ex Baldwin (1981), RJE (H032), Baldwin (1985). –°	1.08 1.07 [-]
			Other references: Carlyon-Britton 635 (pt), '+GODPINE ON HVNT'; Carlyon-Britton 1811 (pt), '+GODPINE ON HVNT', broken and repaired; Lockett 3821 (pt) '+GODPINE ON HVNT'; Martin, List 8 (1973), H.10. The City of London hoard (1872) is recorded as containing four coins reading 'GODPINE ON HVNTE', (NC, New Series, 16 (1876), p. 351) and another reading '+GODPINE ON HVNT.' (NC <sup>3</sup> , 5 (1885), p. 271).	
			HAROLD II (1066)	
			PAX type, bust without sceptre (BMC ia)	
			The following coins are of variety C identified by Hugh Pagan in Numismatiska Meddelanden XXXV, 177–205.	
			Godwine	
285	Aa	O. R.	+HAROLD REX ANG: +GODPINE ON HVNIED	
		(1)	BMC 42. 0°	1.38
		(2)	SCBI South-Eastern Museums 1691, Norris Museum, St Ives. Glendining, 11 October 1993, 270 (withdrawn).270°	1.37
		(3)*	RJE (H065). Ex Glendining. 11 October 1993, 271. 90°	1.30
			Other references: Berghe 283, Carlyon-Britton 1832; Bruun 190 (pt), all reading '+GODPINE ON HVNIED'. BCH, p. 90, also lists an 'uncertain mint (HVMID)', from the St Mary Hill Church, London hoard (1775).	
			WILLIAM I (1066–1087)	
			In the Norman series the die axis has been determined by the position of the initial cross on the reverse.	
			Profile-Cross Fleury type (BMC i)	
			Godric	
286	Aa	O. R.	+PILLEMVS REX N +GODRIC ON VNTEDV	
		(1)*	BMC 24. See VCH Huntingdonshire, II, Plate opposite p. 123, 1. 45°	1.25
		(2)	SCBI Yorkshire 1107, The Yorkshire Museum, York Minster excavations (1970). Repaired fragment. 225°	[0.69]
287	Вс	O. R.	+PILLEMV REX +GODRIC ON HVNT	
		(1)*	RJE (H034). Ex Smith (1895) 55, O'Hagan 402, Carlyon-Britton 674 (pt), Lockett 3829 (illustrated). Baldwin (1981). 90°	1.29
			Thurgrim	
288	Aa	O. R.	+PILLELMIIS REX AI +ÐVRGRIM ON HVN	
		(1)*	RJE (H087). Found at Southwark Bridge (c.1989). NCirc, December 1991, 7977 (illustrated) and May 1995, 2040. Ex Spink (1996). Perforated, 90°	[0.74]

			THE MINT OF HUNTINGDON	137
			Profile-Cross Fleury and Bonnet type mule (BMC i/ii)	
			Godric	
289	Ba	O. R.	As 287 above +GODRIC ON HVTED Probably from same reverse die as a (290) below.	
		(1)*	BMC 72. Corroded. 180°	[0.98]
			Bonnet type (BMC ii)	
			Godric	
290	Aa	0.	+PILLEMV REX  Overstruck on a PAX reverse of Harold II, but apparently not the only other known die (Godwine a).	
		R.	+GODRIC ON HVTED Probably same reverse as a (289) above. Overstruck on an obverse of Harold II with sceptre (or William I, Profile-Cross Fleury).	
		(1)*	SCBI Ashmolean 24. In Lockett 3834 erroneously transcribed as reading HVNTED. 315°	1.26
291	(B)c	O. R.	+PILLEMV REX Possibly from the same die as A above. +GODRIC ON [ ]TVN	
		(1)*	SCBI Yorkshire Collections 1118, The Yorkshire Museum. Jubbergate hoard (1845). 135°	1.26
292	Се	O. R.	+PILLEMVS REX +GODRIC ON HVNTI	
		(1)*	BMC 87. Jubbergate hoard (1845). See VCH Huntingdonshire. II, Plate opposite p. 123, 2. 225°	1.05
293	Dg	O. R.	+PILL[]VS REX +GODRC ON VNTE	
		(1)*	RJE (H024). Ex Martin (1980). Chipped and worn. 225°	[0.99]
			Other references: in BNJ 7 (1910), p. 3, P.W.P. Carlyon-Britton in his 'Numismatic History of the Reigns of William I and II' includes three readings not known from traced coins: 'GODRIC ON HVNT', 'HVNTE' and 'HVNTEN'.	
			Godwine	
294	Aa	O. R.	+PILLEMV REX +GODPINE ON HIII	
		(1)*	RJE (H050). Found near Wentbridge, Pontefract (1985). See <i>BNJ</i> 55 (1985), p. 73, Plate 3, 70. Ex Spink (1987). 315°	1.15
295	Ab	O. R.	As above +GODPINE: ON HVN	
		(1)*	SCBI Yorkshire Collections 1119, The Yorkshire Museum. 180° By a misalignment within a table, BMC, Norman Kings I. p. cciv, refers to a coin of Siwate instead of this coin.	1,10
296	Вс	O. R.	+PILLEMVS REX +GODPINE ON IINT	

130			11.11.11.11.11.11.11.11.11.11.11.11.11.	
		(1)*	RJE (H004). Ex Wells and Elmore Jones (not auctioned). See <i>BNJ</i> 20 (1929–1930), Plate V,1. Baldwin (1977). 90°	1.01
			Canopy type (BMC iii)	
			Godric	
297	Aa	O. R.	+PILLEMV REX I- Sinister canopy ball between V and R. +GODRIC ON HVNTE	
		(1) (2)*	Baldwin (1995), _° RJE (H012), Ex Seaby (1978). Chipped. 135°	1.29 [1.17]
			Godwine	
298	Aa	O.	+PILLEMII REX I- Sinister canopy ball between upright and tail of R. +GODPINE ON VNTEI	
		(1)*	BM (1955), Ex Drabble 565 (Plate XVI), Lockett 904 (illustrated), 0°	1.02
			Two Sceptres type (BMC iv)	
			Godric	
299	Aa	O. R.	+PILLEM REX IINGLI +GODRIC ON HIINTEN	
		(1)* (2) (3) (4) (5)	BMC 236. Ex Carlyon-Britton 1102, Plate IX, 2. See also VCH Huntingdonshire, II, Plate opposite p. 123, 3. 90° Martin, March 1998, H69. Ex Doubleday 703. 315° (sic) Glendining, 11 October 1993, 272. –° RJE (H041). Ex Elmore Jones 1301. 0° Lockett 3842. Ex Carlyon-Britton 698. See BNJ 7 (1910), Plate XVIII, 4. –°	1.35 1.35 1.30 1.10
			Other references: SCBI Yorkshire Collections M135, missing coin from Monkgate, York hoard (1851), reading '+PILLEM REX ANG', not otherwise known, and '+GODRIC ON HVNTEN'; Lloyd (1857), 45; 5 Montagu 71, Drabble 908.	
			Godwine	
300	Aa	O. R.	+PILLEM REX ANGLO +GODPINE ON HVNTE	
		(1) (2)* (3)	RJE (H059). Ex Baldwin (1991). 0° RJE (H074). Ex Finn, List 3 (1994–5), 66. 0° Finn List 7(1996), 115, (illustrated). –°	1.31 1.27 [-]
301	Ab	O. R.	As above +GODPINE ON HIIN	
		(1)*	RJE (H066), Glendining, 11 October 1993, 273 (catalogued as 'Godric'), 90°	1.36
			Two Stars type (BMC v)	
			Godwine	
302	Aa	O.	+PILLEM REX IINIII	
		R,	+GODPINE ON HIITED	

			THE MINT OF HUNTINGDON	139
		(1)*	RJE (H036). According to Elmore Jones's ticket is 'WEH' (W.E. Hidden) coin tabled in <i>BMC Norman Kings</i> , I, p. ccxiv. Ex Rushton, Chapman. Baldwin (1981). 180°	1.38
			Other references: Cuff 669, two coins: "+GODPINE ON HVT" and 'another".	
			Sword type (BMC vi)	
			Godwine	
303	Aa	O. R.	+PILLELM REX [I] +GODPINE ON HIITD	
		(1)*	RJE (H055). Ex Morrison 52 (see also <i>BNJ</i> 7 (1910), p. 4), Wills 315. Doubleday 704. 180°	1.32
		(2)	BM (1955). Ex Carlyon-Britton 1246 (see also <i>BNJ</i> 7 (1910), p. 4 and Plate XVIII, 5, and <i>VCH</i> Huntingdonshire II, Plate opposite p. 123, 4), Lockett 947 (illustrated). 90°	1.28
			Profile-Cross and Trefoils type (BMC vii)	
			Ælfwine (Ielfwine)	
304	Aa	O. R.	+PILLELM REX +IELFPINE OII HNT	
		(1)* (2)	RJE (H056). Ex Dangar 251 (pt). Doubleday 705, 270° SHM 11300–291. Mannegårda, Lye, Gotland hoard (1900). 270°	1.40 1.40
			Other references: Cuff 682, referred to in BNJ 7 (1910), p. 4 and described as reading '+IELFPNE ON H'.	
			PAXS type (BMC viii)	
			Here included under its conventional position as the last type of William I but in the view of the author more likely to have been the first type of William II.	
			(Ælfric (Ielfric))	
(305)	Aa	O. R.	+PILLELM REX [+IE]LFRIC ON HIITI	
		(1)*	SCBI St Petersburg 35. Beaworth hoard (1833). Ex Brumell (1850) 154, Stroganov. SCBI states 'appears to be Huntingdon although it could be a contracted form of Hamtun (Northampton)'. 180°	1,46
			Other references: BMC Norman Kings I, p. ccxiv, cites Ælfric, recorded as 'ÆLFRIC ON HVTI' in $NC^4$ 4 (1904), p. 264.	
			Ælfwine (Ielfwine)	
306	Aa	O. R.	+ILLELM REX +IELFPINE ON HIIT	
		(1) (2)	Glendining, 11 October 1993, 274. –° Elmore Jones 1626 (illustrated). Ex Youde. –° Elmore Jones 1626 (illustrated). Ex Youde. –°	1.45 1.45
		(3)	Fitzwilliam Museum 284. Beaworth hoard (1833). Ex Allen 314, Carlyon-Britton 729 (pt). See also BNJ 7 (1910), p. 4 and Plate	1.43
		(4)	XVIII, 6). 180°  BMC 710. Beaworth hoard (1833). See BNJ 7 (1910). p. 4 and	1.43
			VCH Huntingdonshire II, Plate opposite p. 123. 5. 0°	1.41

		(5) (6)*	Williams collection. Ex Ziegler, Doubleday 706 (illustrated). 0° RJE (H015). Ex Youde, Mack (SCBI 1427), NCirc, May 1978, 6368 (illustrated). Baldwin (1978). 0°	1.40
			Other references: BCH p. 12, Beaworth hoard (1833): 'Ælfwine, 6'; 2 Montagu 227 (pt), '+IELFPINE ON HVT'. Carlyon-Britton also gives the following unconfirmed readings in BNJ 7 (1910) p. 4: +IEGELPINE ON HV (HV ligulate) +IEGELPINE ON HVN (VN ligulate) reading retrograde +IELFPINE ON HVN	10000
			WILLIAM II (1087–1100)	
			Profile type (BMC i)	
			Siwate	
307	Aa	O. R.	+PILLELMREX +SIPHTE ON HIITED	
		(1)* (2)	RJE (H035). Ex Baldwin (1981). 0°  BMC 17, Plate XXVIII, 18. Ex Carlyon-Britton 746. See also BNJ 7 (1910), p. 4 and Plate XVIII, 7 and VCH Huntingdonshire II, Plate opposite p. 123, 6. 270°	1.40
			Other references: Carlyon-Britton 1278: 'PILLELMR EX (MR ligulated), +SIPATE ON HNTED'.	
			Cross in Quatrefoil type (BMC ii)	
			Ælfwine (Ielfwine)	
308	Aa	O. R.	+PILLELMEX +IELFPINE ON HIIT	
		(1)*	BM (1919). Ex Lawrence. See VCH Huntingdonshire II, Plate opposite p. 123, 7. 270°	1.38
309	Вс	O. R.	+PILLELM RE[] +IEFPINE [ON] HII	
		(1)*	RJE (H057). Doubleday 707, construed as '+IEFPINE ON HVT'. The Huntingdon attribution of this coin is not beyond doubt. Worn. 270°	[0.98]
			Siwate	
310	Aa	O. R.	+PILLELMREX +SIPIIT ON H[N]TD	
		(1) (2)*	BMC 97. Ex Christmas 209, Allen 314. See BNJ 7 (1910), p. 4 and Plate XVIII, 8. 180° RJE (H031). Ex Bispham. Baldwin (1981). Broken, repaired and lacquered. 0°	1.22 [1.06]
			Cross Voided type (BMC iii)	
			No coins indentified.	
			Other references: Carlyon-Britton in BNJ 7 (1910) p. 4, includes a coin reading '+IELFPINE ON HVN' under 'Type 4', citing Spicer MS. BMC Norman Kings I, p. cexiv cites a moneyer of that name from the Clark sale, lot 62, with the	

comment 'perhaps London'. Carlyon-Britton also cites +GODPINE ON HVTD' from Spicer MS, but BMC Norman Kings, I, p. ccxiv, suggests the coin offered at Sotheby, 25 January 1860, 110, may have been an error for William I type BMC vi, for which the reading is known. Finally, Carlyon-Britton cites a coin reading 'SIPATE ON HVT' and illustrates the reverse (Plate XVIII, 9). The coin, which is in the Fitzwilliam Museum is of type BMC iv, see 312 below.

### Cross Patée and Fleury type (BMC iv)

Siwate

O. +PILLELMRE 311 Aa

Pellet above sinister shoulder. Crown centred below upright of E.

R. +SIPIITOE ON-HIIT

(1)\*RJE (H047). Ex Elmore Jones 1654. Baldwin (1986). 0°

1.41

312 Bc O. +PILLELMRE

Crown centred below E.

R. +SIPIITE ON HIIT

(1)\*Fitzwilliam Museum. See BNJ 7 (1910), Plate XVIII, 9, where reverse is illustrated and shows intact coin. See also under Cross Voided type above, 'Other references'. Broken into three parts with small fragment missing. 0°

[1.38]

## Cross Fleury and Piles type (BMC v)

No coins identified.

### HENRY I (1100-1135)

Only the types for which there are actual or putative coins are listed, BMC types iv, v, vi, vii, viii, ix, xi, xii and xv being omitted.

# Annulets type (BMC i)

(Godric?)

0. ]REX (313)Aa

> R. IC O[N] NIIH Huntingdon (or Northampton)?

(1)\*BNJ 68 (1998) p. 176, Plate 25, 156. Found at Santon Downham, Suffolk, possibly from Thetford by-pass spoil (1994). Cut half penny, 0°

[0.54]

### Profile-Cross Fleury type (BMC ii)

Godric

O. 314 +H[ENRIR] Aa R. JGODRIC ON H[V][

> (1)\*SHM 23040. Halsarve, När, Gotland hoard (1942). See SCBI Reading/Stockholm 241. 0°

1.44

(Sefwine?)

(315)Aa O. **+HENRI RIEX** R. +SEFINIL ON HIII

Pellet in centre of reverse.

142			THE MINT OF HUNTINGDON	
		(1)*	SCBI Scottish Collections 230, Glasgow. See Andrew, NC <sup>4</sup> 1 (1901), p. 227 and Plate II, 9. Also BMC Norman Kings, I, p. ccxv, where Brooke considered the reading doubtful and the coin 'probably' of Southampton, and perhaps from an altered die. 90°	1.32
			PAX (BMC iii)	
			Ælfwine (Ielfwine)	
316	Aa	O. R.	+HENRI REI +IELFPINE ON HV	
		(1)*	RJE (H071). Metal detector find. Ex Spink (1992). 180°	1.18
			Full Face-Cross Fleury type (BMC x)	
			Ælfwine (Ielfwine)	
317	Aa	O. R.	+hE[N]RICVS RE[X] +AL[ ]NE:ON:hVN	
		(1)*	BM (1991). Mansfield Woodhouse, Nottinghamshire	1.09
		(2)	hoard (1991). Bent. 270° BM (1991). Mansfield Woodhouse, Nottinghamshire	1.08
			hoard (1991). Bent and corroded. –°  Godwine	[0.94]
318	Aa	Ο.	]hENR[	
310	Ad	R.	ODPINE [] hV	
		(1)*	RJE (H072). Metal detector find. Ex Baldwin (1991). Corroded, chipped and perforated, $180^{\circ}$	[1.12]
			Star in Lozenge Fleury type (BMC xiii)	
			Ælfwine (Ielfwine)	
319	Aa	O. R.	]henricus r: +Æ[]ine[:]on h[v]nte	
		(1) (2)*	Lincoln Museum. Lincoln hoard (1971–2). 180° BM (1973). Lincoln hoard (1971–2). –°	1.38 1.06
			Other references: Vosper offered a coin (List 110, November/ December 1999, not illustrated) construed as reading +ALF[PINE:] ON [h]VHT'. The author was unable to extract an intelligible reverse legend from the coin.	
			Pellets in Quatrefoil type (BMC xiv)	
			Ælfwine (Ielfwine)	
320	Aa	O. R. (1)	[ ]NRICVS RE + ]ELFPINE:ON:hV[ SCBI South-Eastern Museums 1917, Norris Museum, St Ives. 'Canterbury' (= Bournemouth) hoard (1901)? See VCH Huntingdonshire, II, Plate opposite p. 123, 8 and BNJ 33 (1964).	
		(2)*	p. 169. 160°  SCBI South-Eastern Museums 1916, Norris Museum, St Ives.  'Canterbury' (= Bournemouth) hoard (1901). This coin is	1.41
			construed as reading 'hVN—' in BNJ 19 (1927–8), p. 97. Ex Baldwin (1902), Carlyon-Britton, 160°	1.30

Derlig

321 Aa O. [ ]NRICVS RE

> R. +DERLIG:ON:hVNTED:

Heel of L touches R.

(1)\*BMC 131. Watford hoard (1818). Ex Rashleigh 414, where transcribed as '+DERLIG:ON:hVNTAN'. Andrew in NC4 I (1901), p. 227, gives the reading '+DERLIG:ON:hVNTFO: from the Watford find', possibly a misreading of this coin - but see below for a similar transcription of a coin from the 'Canterbury'

(= Bournemouth) hoard (1901). 225° Glendining, 11 October 1993, 280 (pt). Chipped. - o

1.02 [1.01]

1.10

322 Bc O. +hENRICVS RE

(2)

+DERLIG[:ON]:HVN[ R.

R and L separate.

(1)\*SCBI South-Eastern Museums 1915, Norris Museum, St Ives. 160° 1.34

BM (1985). Ex Elmore Jones. Ex Lockett 3913 (pt). SCMB (2)April 1961, 5419 (Plate 24), and October 1961, H513.180°

1.41

Other references: Andrew in NC4 I (1901), p. 227, gives the reading '+hENRICVS R', '+DERLIG:ON hV..F.:' from the Carlyon-Britton collection. This is doubtless the same coin as Carlyon-Britton 1927 (pt), reading '+DERLIG:ON:hV--, broken'; BNJ 19 (1927-8), p. 97, '+h[ENR]ICVS RE', '[+D]ERLIG:ON:HVN [TFO]' from the 'Canterbury' (= Bournemouth) hoard (1901) and purportedly bought by Carlyon-Britton from Baldwin in 1902.

(Wulfred) (-)

BNJ 19 (1927-8), p. 97, cites a coin reading

O. +bENRICVS R

R. +PVLFRED: ON: hVN

from the 'Canterbury' (= Bournemouth) hoard (1901), acquired by Carlyon-Britton from Rollin and Feuardent in October 1901 and sold as lot 1377 (not illustrated). This coin has not been traced.

#### STEPHEN (1035-1054)

#### Watford type (BMC i)

(-)(Godmer)

 $NC^5$  2 (1922), p. 72 Plate iii is of a coin reading

O. | NE R

R. +GOIMER:ON[]N

from the South Kyme hoard (pre 1922), described as from the Lawrence collection. The attribution of this coin is uncertain and its whereabouts unknown.

#### Cross and Fleurs type (BMC iii)

Waltier

323 +STIEFNE-R Aa O.

> R. +PALTIER:[ON]:hVN

(1)\*BM (1990). Wicklewood hoard (1989). -

(2) Ballingal collection. London Bridge hoard (c. 1850). Ex

144			THE MINT OF HUNTINGDON	
			Rashleigh 612, Carlyon-Britton 1483, Lockett 3940. See <i>BNJ</i> 35 (1966), p. 51, where described as 'uncertain mint but possibly Huntingdon'. Illustrated in Plate III, 70. Cut half penny. 0°	[0.63]
			Profile-Cross and Piles type (BMC vi)	
			(Uncertain moneyer)	
(324)			A coin from the Wicklewood hoard (1989), weighing 1.40 g has been suggested as possibly from Huntingdon, but the reverse legend cannot charitably be so construed.	
			Awbridge type (BMC vii)	
(-)			(Derlig)	
			A coin was shown to the BM in 1995 and construed as reading O. +STIEFNE Double struck. R. +DELING:ON:bVN Double struck. The whereabouts of this coin is unknown.	
			Godmer	
325	Aa	O. R.	+STIEFNE: +GOD[MER]:ON hVN:	
		(1)*	BMC 194, Plate LV, 14. Ex Berghe 330, Brice and Montagu 307. In both sales the obverse reading is given as '+STIEFNE RE' and the reverse as '+GODPINE ON HVN', see also VCH Huntingdonshire, II, Plate opposite p. 123, 9, 45°	1.48
326	Вс	O. R.	+ST[ ]E ··· +GO[ ]ON hV[ ]T	
		(1)* (2)	RJE (H038). Awbridge hoard (1902). Ex Carlyon-Britton 1471, Elmore Jones 1105. see <i>BNJ</i> 28, (1957), p. 549 and 36 (1967), p. 91. 135° Moscow. See <i>BNJ</i> 36 (1967), p. 91, Plate IV, 29. 45°	1.51 1.48
			Waltier	
327	Aa	O. R.	+STIEFNE +PALTEIR ON HVN	
		(1)* (2)	RJE (H042). Ex Drabble 995, where attributed to London. Elmore Jones 1399. 315° BM (1958). Ex Lockett 2963, illustrated. 45°	1.20 1.11
			Other references: BMC 228 from the Awbridge hoard (1902) reading	
			O.[ ]NE: R. ][P]ALTIER[	
			is attributed by Brooke to 'Norwich?' but he was unaware of a moneyer Waltier also striking at Huntingdon. The attribution of this coin must await a specimen with a fuller reverse reading.	
			Grantley 1300, illustrated. Ex Reynolds 62 and interpreted as reading	
			O. +STIEFNE R. +ACEBI:ON VN[]	

was catalogued as 'Huntingdon?'. Harris (SCMB December 1984, p. 315, construes the moneyer as ASEBI. The illustration, however, appears to read P rather than B and the illegible portion of the legend between that letter and N has space for an initial cross and three or four other letters.

#### Abbreviations

Well-known auction sales are described by the vendor's surname, followed by the lot number. Sales up to 1984 can be more specifically identified by referring to Harrington E. Manville and Terence J. Robertson, *British Numismatic Catalogues*, 1710–1984 (Oxford, 1986).

In addition to the conventional abbreviations used in the BNJ, the following are employed in the catalogue of coins:

BCH J.D.A. Thompson, Inventory of British Coins Hoards, AD 600–1500 (Oxford, 1956).

Bergen Historisk Museum, Bergen University, Norway.

BM (year) Coins acquired by the British Museum, London, since publication of the latest relevant catalogue,

with year of acquisition.

Commentationes Commentationes de Nummis Saeculorum ix-xi in Suercia repertis, 1 (Stockholm, 1961).

CNS Corpus Nummorum Saeculorum ix-xi qui in Suercia reperti sunt (Stockholm, 1975—).

Copenhagen Nationalmuzeet, Copenhagen, Denmark.

Hild. Bror Emil Hildebrand, Anglosachsiska Mynt (Stockholm, 1881) and the systematic collection

therein catalogued.

KMK Kungl. Myntkabinettet, Stockholm, Sweden.
Lund Lunds Universitets Historiska Museum, Sweden.
Oslo Universitetets Myntkabinett, Oslo, Norway.
RJE (H---) Eaglen collection with acquisition number.

Ruding The Rev. Rogers Ruding, Annals of the Coinage of Great Britain and its Dependencies, 3 vols.,

3rd. edition (London, 1840).

St Petersburg
Schleswig
Schleswig
SHM
State Hermitage Museum, St Petersburg, Russia.
Archaologisches Landesmuseum, Schleswig, Germany.
Statens Historiska Museum, Stockholm, Sweden.
Stavanger
Arkeologisk Museum, Stavanger, Norway.
Stockholm
Kungl, Myntkabinettet, Stockholm, Sweden.

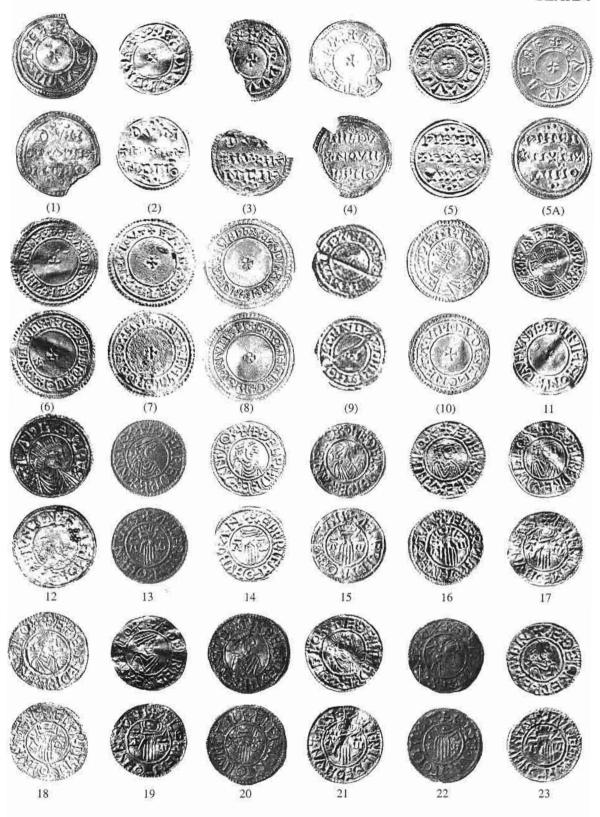
Trondheim Vitenskapmuseet, Trondheim, Norway. Västerås Länsmuseet, Västerås, Sweden.

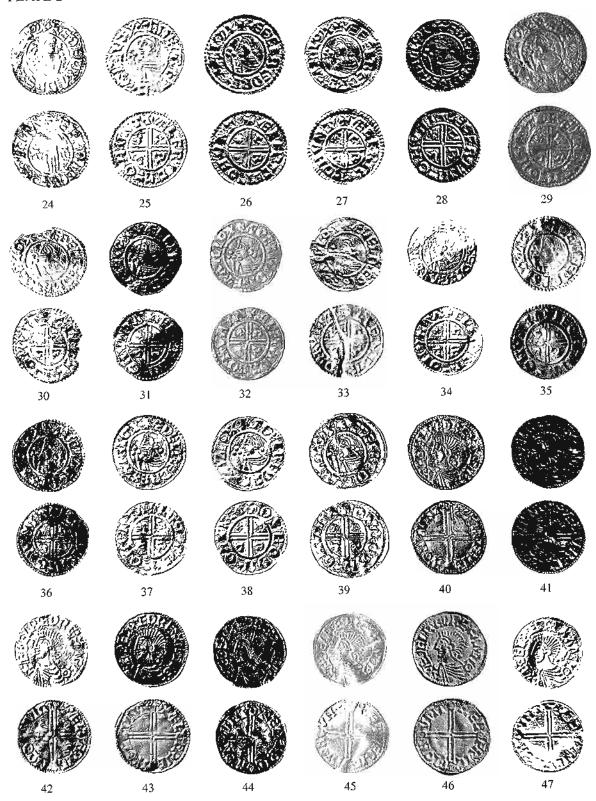
Vienna Kunsthistorisches Museum, Vienna, Austria.

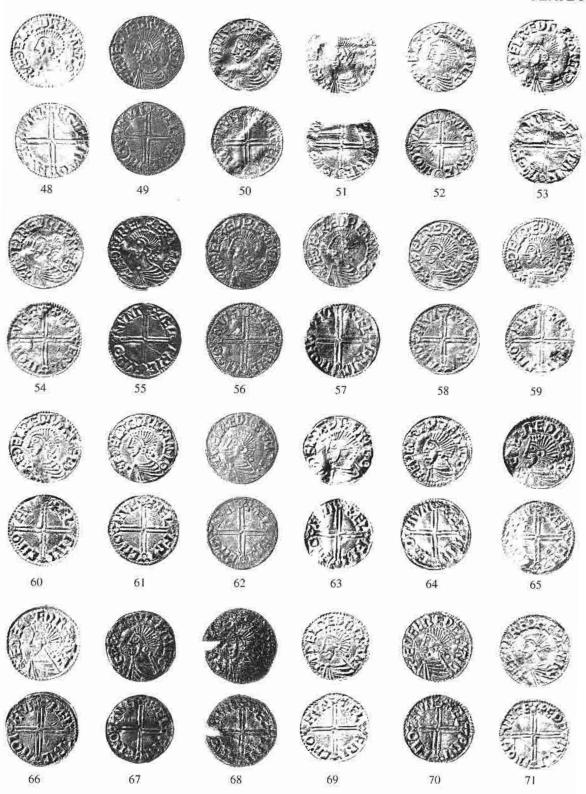
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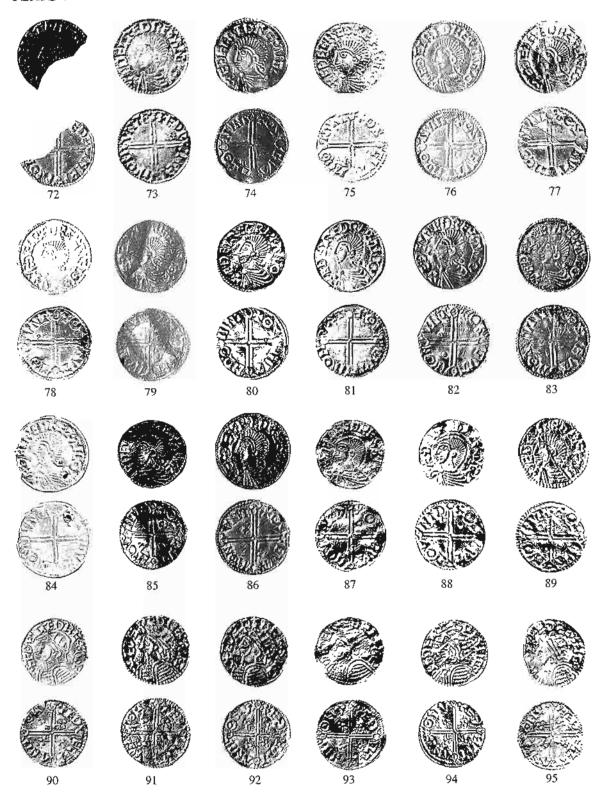


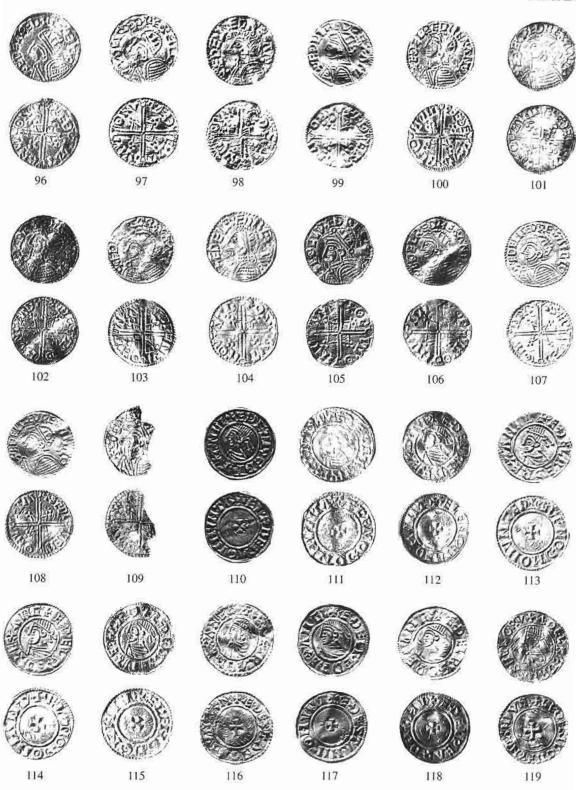




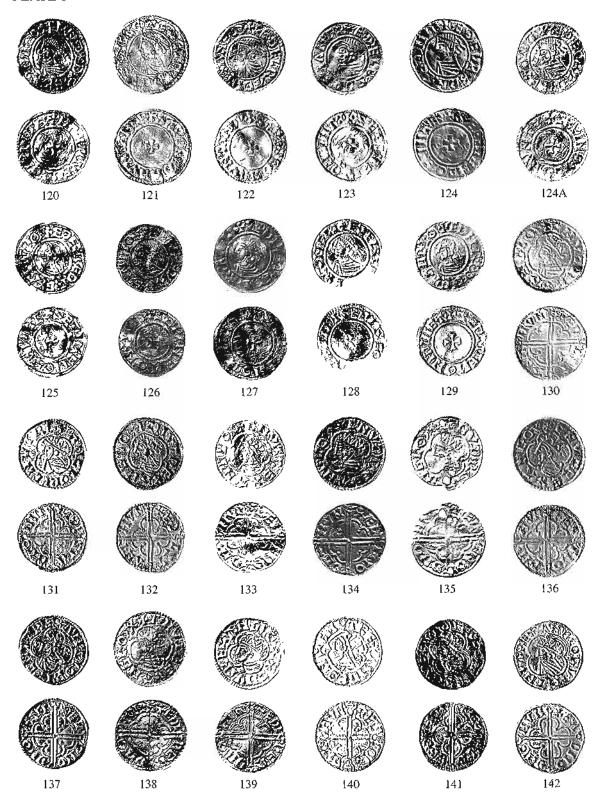
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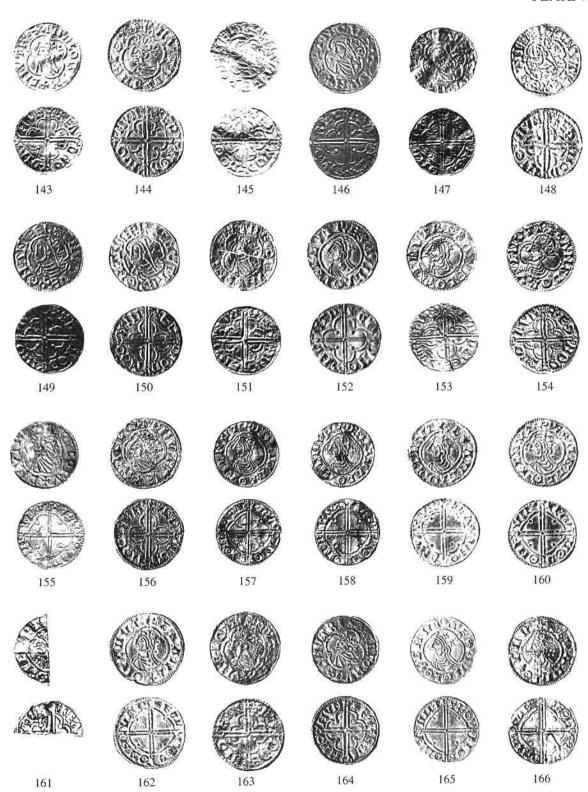
# PLATE 4

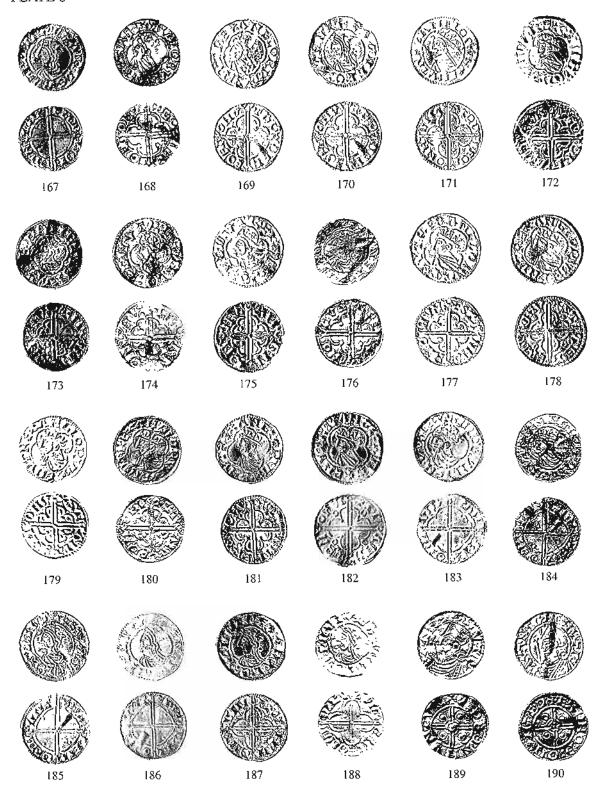


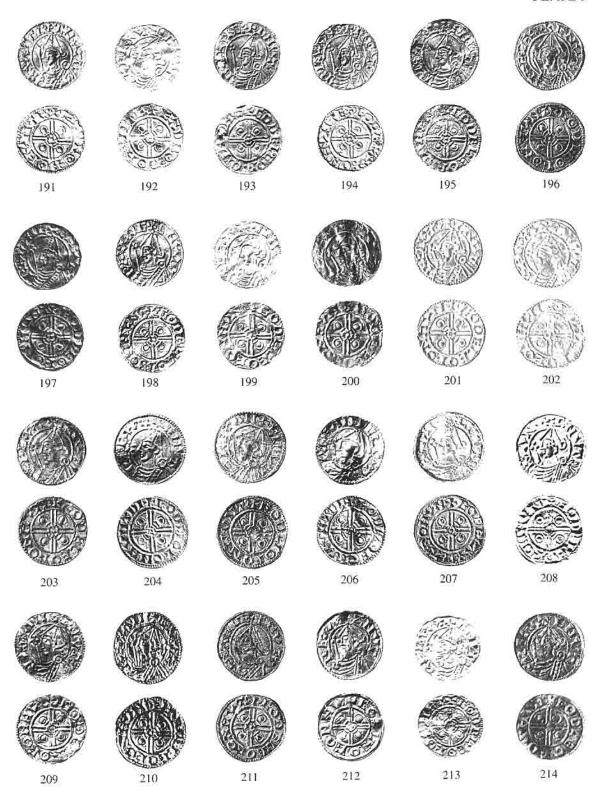


EAGLEN: THE MINT OF HUNTINGDON (5)

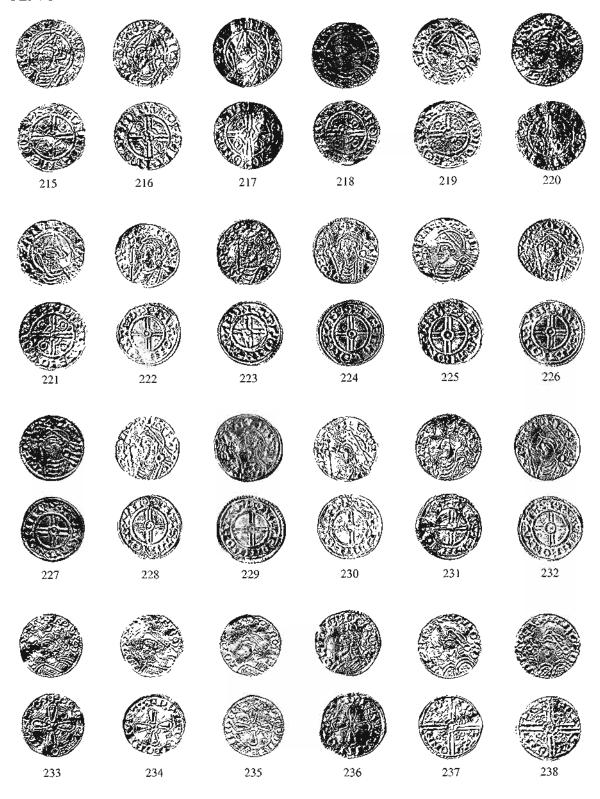


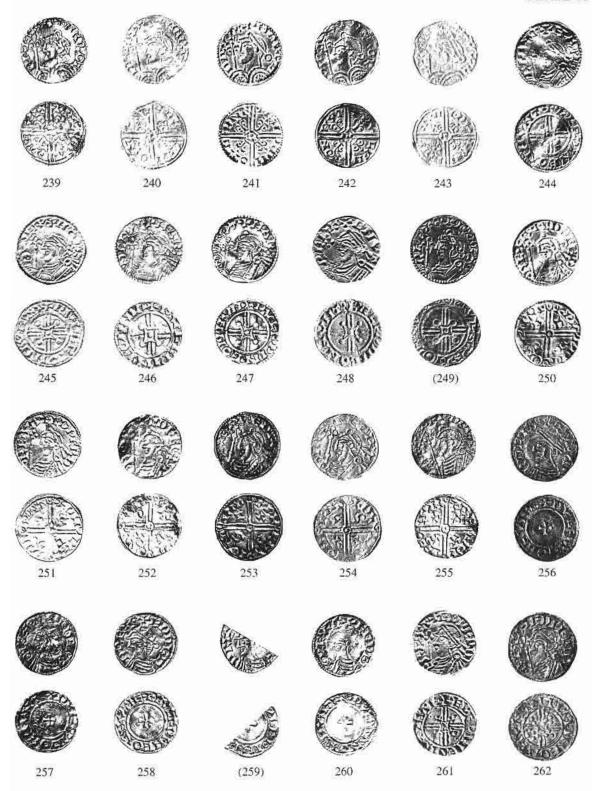


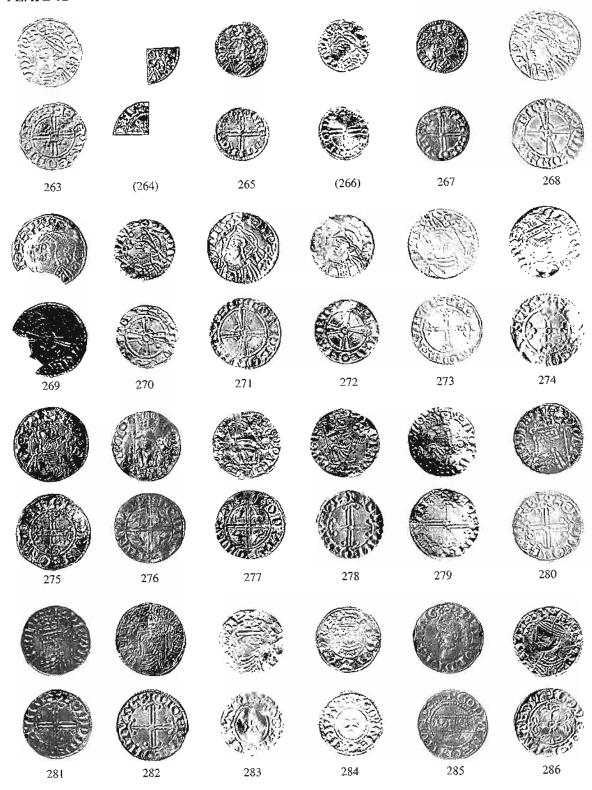


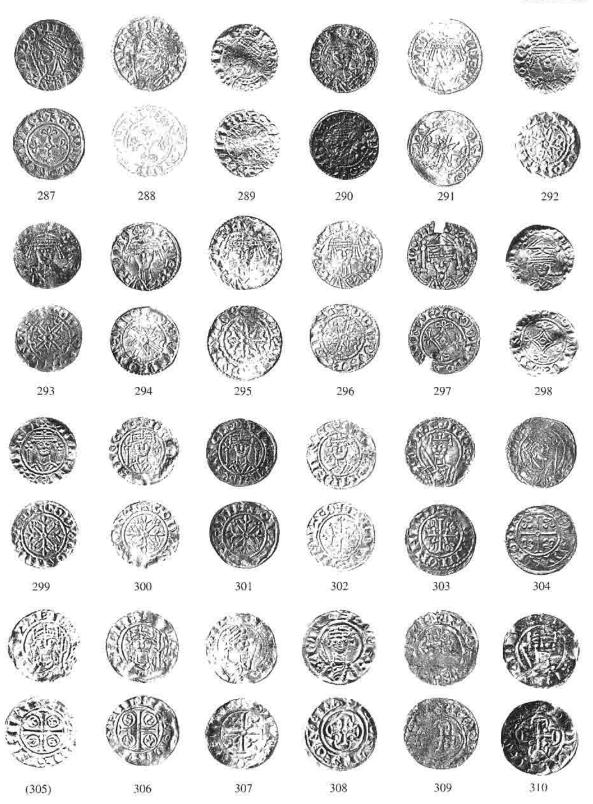


EAGLEN: THE MINT OF HUNTINGDON (9)

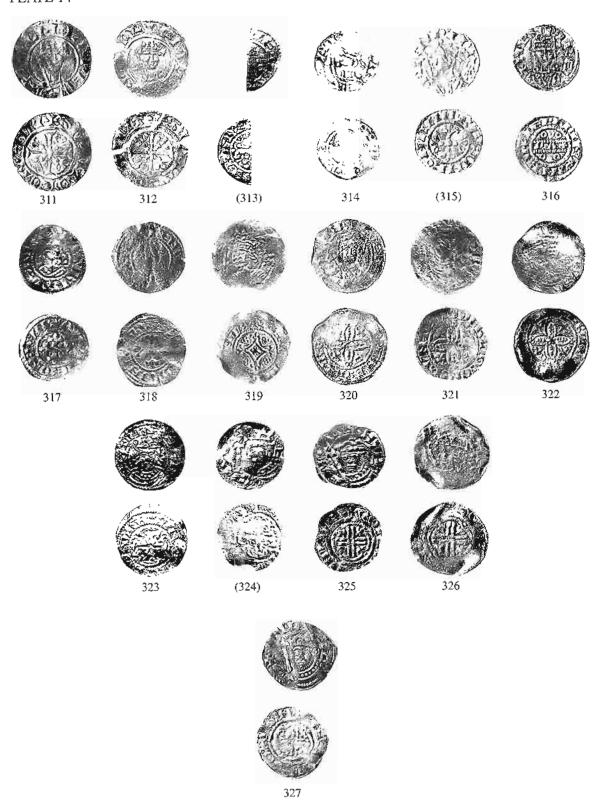








EAGLEN: THE MINT OF HUNTINGDON (13)



EAGLEN: THE MINT OF HUNTINGDON (14)

# NEW HOARDS FROM SEVENTEENTH-CENTURY ENGLAND

B.J. COOK

## 1. Fressingfield, Suffolk

This small find is the silver component of a group of material discovered by Mr R.F. Creasey, the landowner of Home Farm, Fressingfield, Eye, Suffolk in the period August to November 1997, following harvest. The silver coins were reported to the coroner as potential Treasure and passed to Jude Plouviez of Suffolk Archaeological Service, who listed the find. As no museum had any interest in acquisition, the find was disclaimed by the Department of Culture, Media and Sport under the system introduced by the Treasure Act, which obviates the need to proceed to an inquest in this circumstance. The coins were then returned to the finder.

The finder was examining the site as a known source of medieval and later finds. It is one of a number of settlements which have been identified along the south edge of Great Whittingham Green. The site (FSF 041) was known to be a green-edge house site, the earlier occupying cottage having been demolished some time after 1950. The coins were accompanied by a scatter of other finds, mostly typical miscellaneous medieval and later metalwork, including medieval blades and arrowheads, numerous lead musket balls and two bronze double buckles of the sixteenth or seventeenth centuries. There were also a number of copper coins from the late seventeenth century onwards. Field-walking on the site in 1991 had produced a spread of pottery dating from the sixteenth to the nineteenth centuries, merging with an earlier medieval scatter of thirteenth to sixteenth-century pottery to the north. The coins and other recent finds appear to be associated with the demolished cottage site, rather than the medieval site.<sup>1</sup>

However, the silver coins found were clearly not a group of casual, individual losses. Consisting mostly of shillings, they represent a single body of material, possibly the contents of a lost purse, with a face value when deposited of 14s. 4d., and dating perhaps to the 1630s, given that the latest coin present was issued in 1634–5. This gives the find some interest, as hoards from the early years of Charles I are scarce things. Though small, the Fressingham find does indicate the limited impact on currency made by mint output in the first decade or so of Charles I's reign against the accumulated Elizabethan and Jacobean material, evidence confirmed by another recently found hoard of 122 coins from near Doncaster, dating to around 1632–3 on the basis of its single coin of Charles I.<sup>2</sup> Even the Farmborough hoard of c.1638–9 had only forty coins of Charles out of a recorded total of 515 silver coins, i.e. under eight per cent.<sup>3</sup> It would need the rocketing silver issues of the late 1630s and early 40s, fuelled by the input of Spanish silver, to produce the currency profile familiar from the body of Civil War hoards.<sup>4</sup>

I am very grateful to Jude Plouviez for this information about the site.

<sup>&</sup>lt;sup>2</sup> Warmsworth hoard: for brief listing see 'Coin Hoards 2000', NC 2000; full record to be published by Doncaster Museum, which acquired the hoard: meanwhile, information is on file at Doncaster Museum and the British Museum.

R.H.M. Dolley, 'The Farmborough Treasure Trove', NC 1953, pp. 150-3; and, with P. Spufford, 'Farmborough Treasure Trove - Addenda', NC 1954, pp. 218-19.

E. Besly, English Civil War Coin Hoards, British Museum Occasional Paper No. 51 (London, 1987), pp. 54-5.

		CATALOGUE	
Elizabeth I			
Shilling		cross crosslet (1560–1)	2
Cimana		tun (1591/2-94)	2
Sixpence		acorn (1573-4 1573)	I
Halfgroat		uncertain mark, 1582-	l
James I			
First coinage			
Shilling	2nd bust	thistle (1603-4)	2
		lis (1604)	2
Second coinage			
Shilling	3rd bust	lis (1604–5)	1
_	4th bust	coronet (1607-9)	1
Sixpence	3rd bust	lis	1
Halfgroat		escallop (1606–7)	1
Third coinage			
Shilling	6th bust	thistle (1621-3)	1
Charles I			
Shilling		plume (1630-1)	I
		bell (1634–5)	l

## 2. Wroughton, Wiltshire

The Wroughton find was discovered on 27 May 1998 by June and Glen Bailey, whilst creating a patio to the rear of their house in Old Wroughton. The hoard, with its container, was delivered to the British Museum on 30 June, a report was prepared for the coroner and the group was declared to be Treasure at an inquest on 30 September. The Swindon Museum wished to acquire the find, which therefore went before the Treasure Valuation Committee.

The 219 coins were found a few metres from the backdoor of the finders' house, buried about four feet down, close to a sarcen stone. The cottage itself dates back to at least the mid seventeenth century, when it existed as a single-storied structure. After the 1660s it was given an extra floor, and has had further additions since. Along with the coins were the remains of a single pot, dating from perhaps the mid to late sixteenth century. The site of the find, whatever the original purpose of the building, lay close by a malthouse with maltmill and 'millehouse', listed in the inventory of goods and chattels of Bartholomew Brind on his death in 1671. Brind was the proprietor: there would have been a miller installed in the property itself. It was one of six mills ranged along the Wroughton Stream, the last before it joined the Fonthill Brook to become the River Ray. Another cottage nearby (not the find-spot) carries evidence of having been the millhouse itself.

The face value of the Wroughton hoard was £9 15s. 8d., reckoning the Irish shillings at 9d., as they were then being tariffed. The coins are in good condition from the point of view of weight, corresponding well to the levels of much larger hoards, even the Ryhall hoard, despite lacking that find's large proportion of new, uncirculated and die-duplicate triangle-in-circle shillings (for comparison, see Appendix, p. 170 below). It closes with coins of the triangle-in-circle mark, and two Oxford issues dated 1643, making it one of the large number of finds to have been deposited at about this time. However, 1643 Oxford pieces are more usually found amongst the latest coins in hoards otherwise concluding with Tower initial mark (P) (1643–4, pyxed July 15, 1644), whereas hoards recorded as ending with the triangle-in-circle mark do not generally contain Royalist mint issues later than 1642-dated pieces. The one significant exception appears to be the Constable Burton, North Yorkshire, hoard of 236 coins, from a royalist area and datable so late by its locally produced York shilling.<sup>6</sup> As Wiltshire was in the area conquered by the king during the campaign of 1643, this may similarly explain its accessibility to new Oxford issues over Parliamentary coin.

E. Entwhistle, 'The Mills', in Wronghton History 2 (Wroughton History Group, 1984), pp. 17–46.
 G.C. Brooke, 'A find of English coins at Constable Burton', NC<sup>4</sup> 9 (1909), 285–91.

Wiltshire was an area of considerable military activity in 1642–3. In 1642 the active élite of the county held it for the parliamentary party, but the establishment of the king at Oxford and the formation of Hopton's royalist army in the west shifted the balance of power in the county. Over the winter of 1642 Marlborough and Malmesbury were captured by the royalists, who pretty much controlled the whole county after spring 1643, and the last local parliamentary resistance was defeated at the battle of Roundway Down (south-west of Wroughton) in July. From this point, and throughout 1644, Wiltshire remained under royalist control, and subject to the levying of 'contributions'. During 1643 Wroughton, lying a few miles from Swindon, was between the two leading royalist garrisons of Faringdon and Marlborough, and just to the south-west of the main area used for the royalist winter quarters in 1642–3.9 The fact of its being north of the Marlborough Downs would probably have placed Wroughton firmly in Faringdon's ambit, and it also lay not far from the main royalist supply route between Bristol and Oxford. Faringdon was a significant centre of royalist military power throughout the period, its garrison consisting of about 300 horse and 800 foot. It received no serious parliamentary assault until Cromwell made an attempt to take it in April–May 1645, and it surrendered with Oxford on 24 June 1646. 10

In view of this background, it is unsurprising that the Wiltshire-Berkshire-Oxfordshire area has been productive of a number of hoards deposited in the 1642–3 period: in particular one can note a hoard from Marlborough, 11 which also has a royalist mint presence in the shape of a coin or coins from 'Exeter', and the Chilton Foliat II hoard included in this article.

		Weigh	t summary						
		Groat				Sixp	ence		
	1	2	3		Ï		2	3	
Mary	1.39	2 6	69.5						
Elizabeth I - 1561	1.41	2	70.5						
1561-82					2.71	4	1	90.	3
1582-1603					2.72	2	0	90.	7
James I					2.85		3	95	
Charles I					2.98	Ì	7	99.	3
	S	hillings				Halfc	rowns		
	1	2	3		1		2	3	
Elizabeth I - 1561	5.5	12	91.7						
1581-1603	5.6	14	93.3						
James I	5.73	18	95.5						
Charles I	6.01	63	100.2		14.91	1	5	99.	4
		in the	. r a arm						
		CAT	ALOGUE						
Edward VI Third period (1550-3)									
Shilling	tun (1551-3)			1	4.51				
Sixpence	tun			$oldsymbol{1}_1$	2.7				
No. 10 A ST Section 200									
Mary I (1553-4)				025	/ Kirian	102205	E 10	W 852	W 200
Groat	pomegranate			5	1.5	1.76	1.41	1.14	1.31
Mary and Philip (1554-8)									
Shilling	English titles	N1968, date	illegible	1	5.58				
Groat	lis			1	1.21				

<sup>&</sup>lt;sup>7</sup> VCH Wiltshire vol. 5 (1957), edited by R.B. Pugh and E. Crittall, p. 140.

<sup>8</sup> VCH Wiltshire vol. 7, p. 188.

<sup>&</sup>lt;sup>9</sup> M. Falkus and J. Gillingham (editors), Historical Atlas of Britain (London, 1981), p. 95, for a map of the royalist winter quarters in 1642–3.

<sup>111</sup> F.J. Varley. The Siege of Oxford (London, 1932), p. 86.

<sup>11</sup> Besly, as in n. 4, p. 83, D18.

			ar contra	JA11 2.10	_,			^
Elizabeth I (1558–1603)								
Shilling	lis (1558–60), wire line		]	5.8				
	cross crosslet (1560-1)		7	4.8	5.99	4.9	5.57	5.75
				5.55	5.16			
	martlet (1560-1)		4	5.38	5.87	5.46	5.75	
	A (1583-4/5)		2	5.6	6.0			
	escallop (1584/5-87)		2	6.25	5.97			
	crescent (1587–89/90)		1	6.13	0.71			
			3	5.98	5.99	5.8		
	hand (1589/90-91/2)		2			5.0		
	tun (1591/2-94)		2	5.54	5.94			
	woolpack (1594-95/6)		2	5.93	5.23			
	l (1601–2)		1	5.78				
	2 (1602–3)		i	5.0				
Sixpence	pheon (1561-5)	1561	l	2.74				
•	•	1562	2	2.74	2.45			
		1564	1	2.71				
		156?	ĺ	2.72				
	rose (1565-65/6)	1565	2	2.79	2.6			
		1566	3	2.85	2.91	2.36		
	portcullis (1565/6-66/7)				2.71	2.50		
	lion (1566/7—67)	1567	1	2.49	2 45			
	coronet (1567-70)	1567	2	2.77	2.45			
		1568	4	2.86	2.6	2.54	2.2	
		1569	4	2.44	2.72	2.95	2.8	
	castle (1570-2)	1570	)	2.66				
	, ,	1571	i	2.9				
	ermine (1572-3)	1572	2	2.48	2.81			
	C()//////C (15/2-5)	1573	2	2.83	2.86			
	acom (1573-4)	1573	1	2.73				
		1574	1	2.8				
	eglantine (1574–7)		3		2.7	2.65		
		1575		2.79	2.1	2.03		
		1576	l	2.8	2//			
		1577	2	2.73	2.66			
	plain cross (1578–80)	1578	3	2.74	2.88	2.93		
		1579	Ţ	2.97				
		1580	1	2.58				
	long cross (1580-1)	1580	1	2.87				
	bell (1582/3-83)	1583	!	2.77				
		1584	i	2.47				
	A (1583–84/5)	158?	ì	2.54				
	(1504/5 97)		2	2.86	2.69			
	escallop (1584/5-87)	1585			2.09			
		1586	l	2.56				
	crescent (1587-89/90)	1587	I	2.89				
	hand (1589/90-91/2)	1590	2	3.08	2.81			
		1591	]	2.7				
	tun (1591/2-94)	1592	2	2.77	2.57			
		1593	I	2.96				
	woolpack (1594-95/6)	1594	2	2.68	2.77			
	key (1595/6-97/8)	1595	1	2.72				
	anchor (1597/8–1600)	1599	2	2.77	2.53			
		1600	Ĩ	2.49	2.00			
	cypher (1600–1)			2.78				
	2 (1602-3)	1602	1					
Groat	cross crosslet (1560-1)		1	1.39				
	illegible		i	1.42				
James I (1603-1625)								
First coinage (1603-4)								
Shilling	thistle (1603-4), 2nd bust		3	5.46	5.76	5.78		
2	lis (1604-5), 2nd bust		1	5.94				
Second coinage (1604-19)	, ,							
Shilling	lis, 3rd bust		2	5.1	5.45			
Summe	rose (1605–6), 4th bust		3	4.91	5.95	5.72		
			2	5.79	5.88			
	escallop (1606–7), 4th bust			5.84	2.00			
	tun (1615-16), 5th bust		Ì	3.04				

. #0								
150	NEW HOARDS FROI	M SEVENTEEN	H-CEN	TURY ENC	GLAND			
Sixpencelis	(1604–5)	1605	1	2.88				
	rose (1605–6) trefoil (1613)	1605 1613	1 1	2.79 2.88				
Third coinage (1619-25)	ticion (1013)	1013	,	2.00				
Shilling	rose (1620-1)		1	5.87				
	thistle (1621-3)		1	6.1				
	lis (1623–4)		2 2	5.91	5.77			
	trefoil (1624)		2	5.82	6.01			
Charles I (1625-49) Tower mint								
Half-crown II	plume (1630-1)	N2205	l	14.73				
	harp (1632-3)	N2207	I	14.75				
	portcullis (1633-4)		1	14.67				
m	crown (1635-6)	N2209	2	14.91	14.17			
	tun (1636–8)	N2209	3	14.5	15.04	14.85		
	triangle (1639–40)		1	15.1	15.16	14.07	15.15	15.26
	triangle-in-circle (1	041-3) N2214	6	14.93 15.4	15.16	14.97	13.15	15.36
Shilling	lis (1625)	N2216	1	5.97				
J.M.d.i.g	harp (1632–3)	N2223	1	5.92				
	portcullis (1633-4)		2	5.95	5.94			
	bell (1634-5)	N2225	1	5.9				
	crown (1635-6)	N2225	Ţ	5.92				
	tun (1636–8)	N2225	6	6.01	6.03	6.03	6.13	6.44
		N.0000		5.91				
		N2227, small X		5.97				
		N2227, large X N2228	1 1	6.01 5.87				
		N2229	1		ierced)			
	anchor (1638-9)	N2229	4	5.95	6.24	6.2	5.99	
	triangle (1639–40)	N2231	8	5.9	5.87	5.87	6.01	6.0
				6.2	6.03	6.19		
	star (1640-1)	N2231	8	5.79	5.57	6.06	5.71	6.05
				6.06	5.86	6.21		
	triangle-in-circle (1	641–3) 25		5.99	5.85	5.91	5.79	5.93
				6.11	6.01	6.12	5.86	6.11
				5.99	5.6	6.32	6.16	6.3
				6.05 6.16	6.34 5.92	6.15 6.21	6.22 6.19	6.09 5.84
Sixpence	harp (1632-3)	N2240	)	2.9	V. J in	0.21	0.17	5.04
	crown (1635-6)	N2241	2	2.89	2.98			
	tun (1636-8)	N2241	2	2.95	3.05			
		N2243	2	2.95	3.12			
	anchor (1638-9)	N2244	3	3.02	3.06	3.09		
	triangle (1639-40)		4	2.93	2.86	3.1	2.87	
Ab	triangle-in-circle (1	641-3)	3	2.8	3.21	2.95		
Aberystwyth mint (1638–4. Shilling	book	N2331	Ţ	5.65				
Oxford mint (1642–6)	DOOK	112331	1	3.03				
Halfcrown	plume, 1643	N2413	1	14.68				
Shilling	plume, 1643	N2442	)	6.04				
Ireland, James I Second coinage (1604-7)								
Shilling	rose		1	4.27				
	martlet		2	4.26	4.03			
	illegible		1	4.03	7.05			
	-							

## 3. Totnes, Devon, 1930s

This find came to public notice only in 1999, when the coins herein listed were brought to Totnes Museum. <sup>12</sup> They were described as being one third of a hoard discovered in Totnes High Street in the 1930s, but not at the time made known to the authorities. The hoard was reportedly discovered in a jar, on the site of 23–25 High Street, under the floor of the building that had previously stood on the site. The finders were three workmen, who split the find up equally. It was Mrs W. O'Shea, the widow of one of the finders, who recently submitted this portion of the find to Totnes Museum as a donation. A report on the coins was prepared at the British Museum for the coroner, who decided that, in view of the circumstances, an attempt to hold an inquest under the old Treasure Trove procedures would be inappropriate, given the absence of first-hand testimony about the circumstances of the find, plus the wish to donate it to Totnes Museum. The find has therefore been acquired by Totnes as a gift. The fact that the coins listed below form just a part of the original find should be kept in mind for the following analysis.

The face value of the recorded coins when deposited was £7 14s.  $11\frac{1}{4}d$ . Assuming an equitable division of the original find, a total value of perhaps a little under £25 can be presumed. From the evidence of this group, the hoard seems to represent unusually good money, when its weights are compared to other hoards concluding with initial mark (P) (see Appendix, p. 170 below)

The presence of an Exeter crown and half-crown, both dated 1644, as the latest coins in the group seems to be a normal feature of Devon finds while the Exeter mint was operating: Totnes can be compared with the smaller Buckfastleigh, Devon, find of thirty six coins, also including a 1644 Exeter half-crown as its latest coin. 13 The other known Devon hoard also has an Exeter component: it was found at East Worlington, but was deposited some years later. 14 The presence of two Oxford half-crowns is interesting as being the first record of Oxford issues in the south-west. The four royalist mint coins, a crown and three half-crowns, representing eight per cent of the hoard's face value, contrast with the weak showing made by Tower coins of initial mark (P): just three certain coins making just under four per cent of the hoard's value. This weak ending is familiar for hoards concluding in marks (P) and (R), especially in royalist areas. 15

There is a further similarity between the Totnes and Buckfastleigh finds: the presence in both of at least one ducaton of the Spanish Netherlands. Recent research by Besly and Mayhew has suggested a link between the presence of Spanish Netherlands coins in hoards and the progress of Queen Henrietta Maria after her return to England on 22 February 1643, with funds raised on the continent. However, they pointed out that the presence of a ducaton in the Buckfastleigh hoard (latest coin, Exeter 1644) appeared to be anomalous in this context. The Totnes find, also with a ducaton, and presumably deposited at about the same time as Buckfastleigh, would seem to suggest that Spanish Netherlands coins were not here completely accidentally. There may be a link to the siege of Exeter in June-September 1643, in which royalist forces under Prince Maurice and Sir John Berkeley subdued the strongly parliamentary city. The presence of the two Oxford half-crowns of 1643 may also reflect these events.

<sup>&</sup>lt;sup>12</sup> 1 am very grateful to Louis Irwin, curator of Totnes Elizabethan Museum, and Michael Rhodes, Head of Museum Services in Torbay, for their help in the processing of this find.

<sup>13</sup> G.C. Brooke, 'Finds of English coins', NC 12 (1932), 67-71. Besty F5, p. 91.

<sup>&</sup>lt;sup>14</sup> For East Worlington and other hoards with Exeter coins, see Edward Besly, 'The English Civil War mints at Truto and Exeter, 1642–1646', BNJ 62 (1992), 151–2.

<sup>15</sup> Besly, as in n. 4, pp. 6, 33, 56-7.

<sup>&</sup>lt;sup>16</sup> N.J. Mayhew and E.M. Besly, 'The 1996 Broughton (Oxon) coin hoard', BNJ 68 (1998), 154-7.

			Weight	summary							
	H	Halfcrowns			Shillings			Sixpences			
	1	2	3	l	2	3	l	2	3		
Elizabeth - 1561				5.52	7	92					
1561-83							2.64	44	88		
1583-1603				5.78	10	96.3	2.77	15	92.33		
whole reign				5.67	17	94.5	2.67	59	89		
James I				5.7	8	95	2.77	10	92.33		
Charles I	14.88	11	99.2	5.97	47	99.5	3	10	100		

## CATALOGUE

Coins annotated with a c have been obviously clipped; coins annotated s have lines scratched on the obverse portrait.

Edward VI (1547-53) Third Period (1550-3) Sixpence	tun (1551-3)		1	3.05				
Philip and Mary (1554-8) Shilling Sixpence	full titles, 1554 N1967 full titles, otherwise illegibl	e	l l	5.47 2.58				
Elizabeth I (1558-1603) Hammered coinage								
Shilling cross	crosslet (1560-1) martlet (1560-1)		2 5	5.46 5.52	5.34 5.75	5.9	5.77	4.88c
	A (1583-84/5) crescent (1587-89/90)		2 3	5.87s 5.54	5.49 6.1	5.72		
	tun (1591/2–94) woolpack (1594–95/6)		1 2	5.9s 5.87	5.79	J., 2		
	2 (1602–3)		2	5.77	5.76			
Sixpence	pheon (1561–5)	1561 1562	3 5	2.46 2.89	2.79 2.63	2.76 2.66	2.85	2.36
		1565 156–	I	2.72 2.79				
	portcullis (1565/6–66/7) lion (1566/7–67)	1566 1567	3 2	2.76 2.58	2.59 2.88	2.46c		
	coronet (1567-70)	1567 1568	1 4	2.75 2.87	2.81	2.72	2.31c	
		1569 1570	2 2	2.84 2.6	2.75 2.88			
	castle (1570-2) ermine (1572-3)	157- 1572	l 5	2.63 2.77	2.77	2.73	2.74	2.74
	acom (1573–4)	1573 1573	l l	2.72 2.89	2.77	2.75	~., ¬	2.,,-
	eglantine (1574–8)	1574	2	2.67	2.77			
		1575 1576	l 1	2.92 2.79				
	plain cross (1578–80)	1578 1579	1	2.62 2.45c				
	long cross (1580-1)	1580 1580	1	2.69 2.66		0.40		
	sword (1581–82/3) A (1583–84/5)	1582 1584	3 1	2.72 2.83	2.75	2.69		
	escallop (1584/5–87) hand (1589/90–91/2)	1585 1590	l ì	2.61 2.9				
	tun (1591/2-94)	1592 1593		2.85 2.92				
	key (1595/6-97/8)	1596 1597	l I	2.79 2.58				
	1 (1601–2)	1598 1601 1602	1 2 1	2.99 2.84 2.81	2.68			

•	DW HOMICOU	14014	OLVE	LLIVIX.	CLI	IQI	CINOL	י אירעיי	0			155
	2 (1602–3) initial mark an	d date		502	4 1		2.9 2.56	2.3	4c 2.	69	2.79	
Milled coinage Sixpence	star		15	562	į		2.7					
James I (1603–25) First coinage (1603–4) Shilling	first bust		thistle (16	503-4)				ì	5.85			
Sixpence first bust	second bust thistle second bust		thistle 1603 thistle lis (1604-	5)		1603 1604		2 2 1 1	5.9 2.85 2.69	2.7		
Second coinage (1604–19) Shilling	fourth bust		rose (160)	56)		1004		1	2.79 5.47	,	_	
Sixpence	fifth bust third bust		grapes (16 tun (1615 lis	-		1605		2 1 1	6.0 4.99 2.8		5	
	fourth bust		rose rose coronet (1	607-9)		1605 1606 1608		2 1 1	2.77 2.77 2.46	r	9	
Third coinage (1619–25) Shilling Sixpence	sixth bust sixth bust		thistle (21 thistle	-3)		1621		l 1	5.99 2.95			
Charles I (1625-49) Tower mint								_				
Half-crown	group III group IV	(P) (	(1636–8) [1643–4), 1 (1640–1)	V2213		1 1 1	15.0 15.0 15.1	)				
		trian (P) (	gle-in-circ 1643–4)			3 2	15.2 15.0	26 )	14.78 14.68	15.1		
Shilling	group C group D	harp porte	ne (1630–1 (1632–3), cullis (163: (1634–5),	N2223 3–4), N22		1 3 1 2	5.7 5.7 6.0 5.6	12 3	5.65 5.87	5.94		
	group E	crow tun ( anch	vn (1635–6 (1636–8), 1 or (1638–9	6), N2225 N2225 9), N2229	1	5 3 4	6.1 6.0 5.9	)6 )2	5.95 6.03 5.89	6.01 6.1 6.02	6.03 5.9	5.95
	group F/E group F	trian	gle (39–40 gle gle, N2231		-30/1	1 1 1 5	5.8 5.8 6.3	12	6.03	6.0	6.03	5.79
	group		(1640–1)			6	5.9 5.5	8	6.13	6.18	6.08	5.87
		trian	gle-in-circ	le (1641–	3)	11	6.1 6.0 6.2	6	5.86 6.13	6.2 5.85	6.1 5.86	6.35 5.89
Sixpence	group D	(P) (	gle-in-circ 1643–4) (1634–5)	le or (P)		3 1 1	6.1 6.1 2.8	4	5.64	5.88		
Simpeneo	group F	crow trian	n (1635–6 gle-in-circ gle-in-circ	le		5 2 2	3.0 2.9 3.1	19 19	2.96 3.02 3.15	2.95	2.92	2.94
Exeter mint Crown Half-crown	rose rose	1644 1644		N2556 N2566		1 1	2	8.57 3.33				
Oxford mint Half-crown		1643	}	N2413-	14	2	14	4.93	15.19			
Ireland, James I First coinage (1603-4) Shilling	bell (1603-4)					1		4.02				
Second coinage (1604–7) Shilling	uncertain rose (1605-6)					3		3.73 4.09	3.99	3.7		

Scotland, James V	Ī				
Eighth coinage (16	01-4)				
Thistle-merk		1602		1	6.33
Half thistle-merk		160-		Î	3.16
Spanish Netherlan	nds, Philip IV				
Ducaton	Brabant	Antwerp mint	1632	15	32.32

## 4. Chilton Foliat, Wiltshire

The Chilton Foliat II find was made in 1997, one of the last cases to fall under the old Treasure Trove system, before the implementation of the new Treasure Act in September 1997. It was noteworthy also through having been found during a metal detector rally on Sunday, 7 September. The initial discovery was made by Mr B. Jenner, and at the subsequent inquest he and Mr A. Stewart were named as co-finders.<sup>17</sup> The find was passed to the British Museum by way of Devizes Museum, and a report prepared for the coroner in October 1997. It was declared to be Treasure Trove at an inquest held at Salisbury on 31 July 1998. The find was subsequently acquired by the Devizes Museum.

The face value of the seventy five coins in the find was £4 9s., and the latest coins present were the 1644 Oxford half-crown and coins of initial mark (R), in use 1644-5, so a deposit date of around 1644-5 can be suggested. The hoard also represents good quality coin, near the top of the range for the average weights of each denomination and reign when compared to other hoards of similar date (see Appendix, p. 170 below).

Chilton Foliat, like Wroughton, lay close to the heart of royalist power in 1642-6. It lies on the north bank of the River Kennet, and was not far from Hungerford, a royalist garrison in 1643-4, close to the main road from the west to London which linked the major royalist strongholds of Marlborough and Newbury. 18 It was thus close to the scenes of significant royalist victories, particularly the first battle of Newbury in September 1643, after which a garrison of 200 foot, twenty five horse and four guns taken from Earl Rivers' Regiment was established at Donnington Castle. Donnington was besieged briefly in July 1644 by Lt.-Gen. Middleton, and again in September-October, before being relieved by the king from Oxford. Following the second battle of Newbury, the king's treasure was stored in the castle, until it could be reclaimed. The date of these last events would certainly suit the deposit of the hoard. The manor of Chilton Foliat was held by the Popham family, and the then lord, Sir Francis Popham, died in 1644.<sup>19</sup> Chilton Foliat was well within the twenty-mile raiding zone of the local royalist forces, especially those at Donnington, which remained in royalist hands until April 1646. The find appears to be quite similar to another Wiltshire hoard of about the same date, from Allington, All Cannings, about thirty miles away to the west, beyond Marlborough.<sup>20</sup> This was recorded as including at least 106 coins, ending with eight half-crowns of initial mark (R), and with a Bristol or Oxford piece dated 1643.

				Wei	ght summar	Ÿ				
		Halfcrowns				Shillings		Sixpences		
		1	2	3	1	2	3	1	2	3
Elizabeth -	- 1561				5.68	3	94.7			
	1561-83							2.68	8	89.3
	1583-1603				5.86	4	97.7	2.71	5	90.3
James I					5.64	2	94			
Charles I		14.95	14	99.7	5.98	34	99.7	3	4	100

<sup>17</sup> The recovery of the find is described at length in both the Searcher and Treasure Hunting for November 1997.

<sup>18</sup> VCH Wiltshire vol. 16, edited by D.M. Crowley (1999), p. 89.

<sup>19</sup> VCH Wiltshire vol. 16, p. 94.

<sup>20</sup> Besly, English Civil War Coin Hoards, p. 90, F1.

#### CATALOGUE

T2111-41- T		C	ATALOGU	E					
Elizabeth I									
Shilling		cross crosslet (1560–1)	)	2	5.68	5.72			
		martlet (1560-1)			1	5.65			
		A (1583–84/5)			l	5.92			
		hand (1589/90-91/2)		l	6.14				
		tun (1591/2-94)			1	5.65			
0.		2 (1602–3)			1	5.72			
Sixpence		pheon (1561–5)	1561		1	2.65			
		lion (1566/7~67)	1566		1	2.57			
		coronet (1567–70)	1568	2	2.66	2.75			
		castle (1570–72)	1571	]	2.79				
		ermine (1572–3)	1572	)	2.7				
		-1.' (1.570, BO)	1573	)	2.63				
		plain cross (1578–80)	1578	)	2.65				
		A (1583–84/5)	1584	ì	2.88	0.51			
		hand (1589/90-91/2)	1591	2	2.81	2.51c			
		J (1601–2)	1601	2	2.71	2.66			
James I									
First coinage									
Shilling		lis (1604-5), 2nd bust		1	5.42				
Second coinage		(**********************************		^	5				
Shilling		lis (1604-5), 3rd bust		)	5.85				
Third coinage		7,,,			0100				
Halfcrown		trefoil (1624)		)	14.55				
Charles I									
Tower mint									
Halfcrown	П	portcullis (1633~4)		1	15.01				
	III	crown (1635–6)		1	14.75				
	ĬΛ	star (1640-1)		2	14.61	14.95			
		triangle-in-circle (1641		5	14.83	15.39	14.46	15.14	14.9
	III	(P) (1643–4)	N2213	1	14.95				
		(R) (1644–5)	N2213	)	15.24				
		(P) or (R)	N2213	)	14.94				
Shilling		(1630–1)	N2221	Ì	5.67				
		lis (1633–4)	N2223	l	5.9				
	bell (16	,	N2225	l	6.08				
		(1635–6)	N2225	2	5.97	5.73			
	tun (16	36–8)	N2225	3	6.13	6.1	5.88		
		(1/20 0)	N2229	1	5.97				
	anchor	(1638–9)	N2227	1	6.06				
		(1(20, 40)	N2229	]	5.97				
		(1639–40)	N2231	3	6.82	6.04	6.0		
	star (16		N2231	4	5.91	5.99	5.84	6.06	6.03
	triangie	e-in-circle (1641–3)	N2231	7	6.08	6.04	5.93	6.08	6.03
	(D) /16	42 45	210000	,	5.95	6.12	5.05		
	(P) (164		N2231	4	5.86	6.12	5.95	6.4	
	(R) (16		N2231	4	5.72	5.51	5.81	5.46	
Ciumanaa	illegible		N2231	1	6.16				
Sixpence	harp (10			1	2.96				
		(1635–6)	N2044	1	2.96				
	(P) (164	(1639–40) 43–4)	N2244	1	3.03 3.04				
Oxford mint	(1)(10	<del></del>		,	2.04				
Halfcrown	1642	N2409 (groundline, Ox	ford plumas		15.03				
	1644	N2418	toro prome)	ì	15.13				

# 5. Uckington, Cheltenham, Gloucestershire

This group of twelve coins was found at Uckington Farm, Uckington, Cheltenham on 19 February 1995 by Mr M.C. Goodhall, who was metal-detecting with the permission of the land-owner. The site of the find was a small area of land of about four feet square near a hedge on a pasture field which had not been ploughed for some years. Eleven of the coins were found in close proximity, with one other at a little distance (this coin is indicated by an asterisk in the catalogue). Two pieces of lead were found in the same general area, but Dr John Miles, Keeper of Archaeology at the Corinium Museum, who initially examined the whole group of finds, identified them as not being associated with the coins (one was part of a late medieval pilgrim token, the other a piece of scrap). Dr Miles commented that part of the farm dated to at least the seventeenth century.

The coins were reported on by Dr Miles and by the British Museum at the request of the coroner. They were found to be Treasure Trove at an inquest held at Tewkesbury on 26 October 1995. Initially the Cheltenham Museum indicated an interest in acquiring them, but subsequently withdrew its claim, and they were returned to the finder as his reward for properly declaring the find.

This small find (face value 11s.) consists for the most part of fairly routine mid-seventeenth-century currency material. The only real aspect of note is its nature as a deposit of the Common-wealth period, as these are relatively scarce. It may seem, therefore, that the find was dropped during or soon after 1656, and in this it looks to match the much larger Laughton, Sussex (524 coins), Stainton-by-Langworth, Lincs (660 coins) and Theydon Mount, Essex (365 coins) hoards, in its tpq. This, however, appears to be an illusion caused by a major decline in mint output between 1656 and 1660, as evidenced by the contents of the Blackfriars Bridge find (see below). In fact, therefore, for such a small group as this, one cannot give a likely deposit date more specific than, say, between summer 1656 and 1661–2, when all Commonwealth issues were demonetised and recalled.

Besly lists only two other datable Commonwealth hoards: the Soham, Cambs. hoard, deposited in 1649; and another deposited in 1653, which, by coincidence, is also a Gloucestershire find, though from Gloucester itself.<sup>22</sup>

#### CATALOGUE

Edward VI				
Third period (15	550-3)			
Sixpence	im tun (1551-3)		1	2.74
Elizabeth I				
Shilling	crescent (1587-89/90)		1	5.78
	(on rev. over escallop)			
Sixpence	pheon, dated 1561		1	2.65
	anchor, dated 1599		1	2.55
James I				
First coinage				
Shilling	thistle (1603-4), 2nd bust		1	5.91
Second coinage				
Shilling	rose (1605-6), 3rd bust		1	5.62
Charles I				
Halfcrown	crown (1635-6)	N2209	1	14.81
Shilling	harp (1632–3)	N2223	1	5.62
	crown	N2225	Î	5.85
*	triangle (over anchor)	N2229	1	6.13
Commonwealtl	h			
Shilling	sun, dated 1653		1:	6.16
	sun, dated 1656		Î	5.9
				0.000

<sup>21</sup> Besly, English Civil War Coin Hoards, p. 112.

<sup>&</sup>lt;sup>22</sup> For Soham, see Besly, English Civil War Coin Hoards, pp. 45-8; for the Gloucester hoard, see R.H. Dolley, 'Gloucester Treasure Trove', NC<sup>6</sup> 12 (1952), 122-4.

## 6. Blackfriars Bridge, London

With Hazel Forsyth

This hoard of over one and a half thousand coins was recovered by its finder with great labour and skill from the Thames foreshore near Blackfriars Bridge. Following examination at the Museum of London, it was transferred to the British Museum, and a report was prepared on the coins for the City coroner. Under the definition of Treasure Trove as it has been applied under common law, material accidentally lost cannot constitute Treasure Trove. Although the hoard was recovered from the foreshore, an analysis of early London maps and archaeological evidence showed that the coins were originally deposited in the middle of the Thames as it existed in the seventeenth century. Subsequent land reclamation has reduced the width of the river and the find spot is now exposed at low tide. Thus, it was evident that these coins would not have ended up where they were found as a result of deliberate concealment and, in the absence of any other evidence, were assumed to be an accidental loss. Thus, the jury decided that the find could not be designated Treasure Trove.

The find was therefore passed back to the finder. It was sold at auction by Baldwin's on 13–14 October 1997.<sup>23</sup> It was at this point that the hoard was cleaned, to remove a layer of silver choride, enabling Michael Sharp of Baldwin's to refine and correct some of the identifications, and his catalogue should be referred to, particularly as he was able to note details of legends and punctuation which were not previously visible, and to increase the number of certain counterfeits. The catalogue in this report takes account of his corrections where possible, but several discrepancies remain. Also, it seems that a few coins recovered subsequent to the original find were made available, giving a total of 1,582 listed in the sales catalogue: these are not included in the catalogue presented below.

The hoard as examined in the Museum of London and British Museum can be summarized as follows.

3 shillings and 1 sixpence of Edward VI (1547–1553)

3 shillings, 1 sixpence and 1 groat of Mary (1553–8)

123 shillings, 329 sixpences and 2 groats of Elizabeth I (1558–1603)

83 shillings and 36 sixpences of James I (1603–25)

1 6-shillings of James VI of Scotland

158 halfcrowns, 360 shillings and 66 sixpences of Charles I (1625-49), Tower mint

7 halfcrowns and 2 shillings of Charles I, Civil War mints

2 30-shillings and 1 6-shillings of Charles I of Scotland

174 halfcrowns, 187 shillings and 16 sixpences of the Commonwealth (1649-60)

6 counterfeit half-crowns of the Commonwealth

The find was relatively free of counterfeits, but did include a substantial quantity of clipped coin. The face value of the coins at the time of deposit was £92 14s.

The great interest and importance of the find lies in the presence of such quantities of Commonwealth material. This sort of evidence is rare in hoards, since Commonwealth issues were demonetised after the Stuart Restoration, being ordered to be returned to the mint for recoining. The recoinage was announced on 7 September 1661 and was largely completed by late summer 1662. Commonwealth coin ceased to be useable in common payments on 30 November 1661, as Pepys noted, though a further three months was allowed for public payments to the government. Pepys also attested to the success of the withdrawal of Commonwealth coin: in 1663 he reported that, of around £750,000 coined, £500,000 was recovered and another £100,000 accounted for in Ireland and Scotland, plus perhaps another £100,000 exported, leaving relatively little unaccounted for; in 1665 he amended the overall figure for coin recovered to '£650,000 at

<sup>&</sup>lt;sup>23</sup> Baldwin's Auctions, no. 14, 13-14 October 1997, pp. 29-42.

<sup>&</sup>lt;sup>24</sup> C.E. Challis (editor), A New History of the Royal Mint (Cambridge, 1992), pp. 338-9.

<sup>&</sup>lt;sup>25</sup> The Diary of Samuel Pepys, edited by R. Latham and W. Matthews II (London, 1970), p. 224.

least'.26 There was thus little more than a decade available for the deposition of Commonwealth hoards.

There are individual pieces of great scarcity in the find. They include previously unrecorded half-crowns of 1657 (two specimens) and the second known 1659 half-crown. The contents run down to the latest issues of the Commonwealth period, 1660, of which there are ten coins present. The find must have a deposit date of 1660 or not much later. It is tempting to link the find, lost in the mid-Thames in presumably unusual or emergency conditions, with the period and circumstances of the Restoration itself. This may have inclined many people to seek to conceal or move their available cash, particularly if they were linked to the Commonwealth regime (as many in the City were).

The Commonwealth coins also represent a large proportion of the find: nearly twenty five per cent of the coins, and over 30 per cent of its face value. It presumably originated in London itself, where newer coin would be most readily accessible. However, it is difficult to say that its proportion of Commonwealth coin is unusually large, given the shortage of recorded hoards with which to compare it. There are just two substantial hoards on record from the Commonwealth period of a scale suitable for comparison with Blackfriars Bridge, but neither corresponds very closely to this find. Both close with coins of 1655, and have Commonwealth coins present in small quantities: two per cent of the 660 coins of the Stainton-by-Langworth, Lincs., hoard; and nine per cent of the Laughton, Sussex, hoard of 524 coins (mostly half-crowns).<sup>27</sup>

It may be relevant to note the comments made by Samuel Pepys in 1665 about the demonetisation of Commonwealth coin. He noted that, before this was cried down, some goldsmiths had made 'perticular trials what proportion that money bore to the old King's money, and they found that generally it came to, one with another, about 25*l*. in every 100*l*.'.<sup>28</sup> Presumably the 'old King's money' would include all royal issues, and not just those of Charles I himself. As the Commonwealth coin in the Blackfriars Bridge hoard amounted to the equivalent of about 35 pounds out of a hundred, it may be felt likely that it over-represents new coin. However, Pepys also noted the goldsmiths' opinion that this level (£25 in every £100) was an underestimate, since, when the probability of the Restoration became clear, 'people began to be fearful of this money's being cried down, and so picked it out and set it a-going as fast as they could, to be rid of it'. If this opinion is valid, it may be that the Blackfriars Bridge find does in fact fairly represent the state of coinage in the late Commonwealth years. Within the Commonwealth coin, its proportions reflect quite well the output of silver from the mint in the years 1649–60: for example, 46.8 per cent of this silver output occurred between December 1651 and November 1653, while the coin in the Blackfriars Bridge hoard dated 1652 and 1653 provides forty seven per cent of the Commonwealth coin present, reckoned in shilling units.<sup>29</sup>

The average weights of coins in the hoard indicate a currency moving away from the profile familiar from the Civil War period, in that they show a very clear fall from the generally high level present in hoards of the 1640s (see Appendix, pp. 170–2 below). This is probably not surprising. As the high output levels of the mid 1640s receded, the issues of that period experienced the consequences of use and abuse, while the decline of mint output in the 1650s reduced the amount of good, new coin regularly joining the currency. The condition of the hoard may also reflect the consequences of its long river-bed residence, but this was probably not the major factor in this change, as the non-Commonwealth material in the find compares reasonably well with that of the only slightly later Burgelere and Redditch hoards, and even the unusually good quality money of the Congleton hoard of 1670 is not too far away in standards.

<sup>&</sup>lt;sup>26</sup> The Diary of Samuel Pepys, IV (London, 1971). p. 148, and VI (London, 1972), p. 326. If Pepys was referring to the whole Commonwealth coinage, he underestimated, as the total mint output was about £850,000, but as a reflection of the silver coinage £750,000 is virtually spot on: see Challis, A New History of the Royal Mint, p. 689.

Both hoards listed in J.P.C. Kent, 'Hoard reports 16th-20th centuries', BNJ 37 (1968), at pp. 141-2.

<sup>&</sup>lt;sup>28</sup> The Diary of Samuel Pepys, VI (London, 1972), p. 326. Pepys' source was James Temple, chief assistant to Sir Robert Vyner, the goldsmith-banker.

<sup>&</sup>lt;sup>29</sup> Challis, A New History of the Royal Mint, p. 689.

			Weig	ght summar)	y					
	Half-crowns			Shillings			Sixpences			
	1	2	3	1	2	3	l	2	3	
Edward VI				5.11	3	85.2	2.36	ı	78.7	
Philip & Mary				5.28	3	87.9	2.27	1	75.7	
Elizabeth - 1561				5.3	41	88.3				
1561-83							2.43	244	80.9	
1583-1603				5.45	79	90.8	2.51	67	83.6	
James I				5.38	83	89.6	2.59	36	86.4	
Charles I (Tower)	14.45	158	96.4	5.64	360	94.1	2.75	66	91.6	
Commonwealth	14.72	174	98.1	5.77	187	96.2	2.75	16	91.6	

#### CATALOGUE

The following abbreviations have been used: b = bent; c = clipped; f = fragment; p = pierced.

The tonowing above	viations have been asea. o - bent, c - empp	ou, i – iii	Smont, p	- prorece	•		
Edward VI (1547-2							
Third period coinag							
Shilling	im Y (1550-1)	1	4.91				
	im tun (1551-3)	2	5.28	5.14			
Sixpence	tun	$1^{30}$	2.36				
Philip and Mary (1	554-1558)						
Shilling	undated	2	5.09	5.15			
	1554	1	5.59				
Sixpence	1554 N.1170	1	2.27				
Groat	1354 N.IIIV	i	1.38 (f	)			
Elizabeth I (1559 1	1407)						
Elizabeth I (1558–1			6.01	5 20	5.4	4.88	5.53
Shilling	lis (1558–60)	6	5.01	5.68	5.4	4.00	3.33
	1 - (1500 1)		5.18	c 10	c c .		4.00
	cross crosslet (1560-1)	16	4.4	5.43	5.51	4.94	4.93
			5.38	4.25c	5.63	5.74	5.05
			5.1	5.18	5.74	5.6	5.57
			4.9				
	martlet (1560-1)	19	5.58	5.69	5.21	5.37	5.61
			5.68	5.54	5.5	5.64	5.65
			5.49	3.84c	5.77	5.61	5.43
			5.7	4.32c	4.92	5.71	
	bell (1582/3-83)	5	5.75	5.0	3.98c	5.75	5.71
	A (1583-84/5)	12	5.91	5.83	4.79	6.01	4.82
			5.69	5.43	5.0	5.95	6.03
			5.42	5.09			
	escallop (1584/5-87)	12	5.69	5.68	5.41	5.57	5.39
	the state of the s		5.03	5.22	5.7	5.77	5.45
			4.64c	5.7			
	crescent (1587-89/90)	5	5.52	5.86	5.81p	5.06	5.98
	hand (1589/90–91/2)	1	5.79	2.00	0.0.р	0,00	21, 0
	tun (1591/2–94)	13	5.32	5.12	5.03	5.76	5.01c
	tun (1371/2-74)	, ,	5.35	5.65	5.58	5.68	5.22
			5.71	5.86	5.54	5.00	3.22
	woolpack (1594-95/6)	13	5.12	5.98	5.45	5.19	4.88c
	woolpack (1594-9570)	13	4.32c		4.55	5.58	5.01
			5.52	5.62		3.38	3.01
	1(1505// 07/0)	_		4.68	5.63	5.00	5.53
	key (1595/6–97/8)	5	5.34	5.77	6.0	5.89	5.53
	anchor (1597/8–1600)	ŀ	5.94				
	cypher (1600–1)	i	5.68				
	1 (1601–2)	4	5.43	5.62	5.74	5.54	
	2 (1602-3)	7	5.53	5.6	5.18	5.28	5.76
						5.47	5.67
	uncertain	3	4.58	4.81	5.53		

<sup>30</sup> Michael Sharp was able to identify a second sixpence of Edward VI, Baldwin's Auctions, no. 14, 13–14 October 1997, lot 312.

100	NEW HOARDS FROM SE	VENTEE	INTH-CEN	TURYE	NGLANI	)	
Sixpence	pheon (1561-5)						
Sixpence	1561 (29)		1.74	2.64	2.15	2.23	2.35
	1301 (22)		2.15	2.1	2.48	2.18	2.27
			2.72	1.78c	2.3	2.12	2.56
			2.82	1.98	2.41	2.9	2.44
			2.59	2.43f	2.37	2.36	2.34
			2.07	2.24	2.07	2.49	
	1562 (9)		2.39	2.29	2.34	2.51	2.68
	1302 (2)		2.34	2.07	2.95	2.43	2.00
	AND THE PARTY						0.40
	1564 (5)		2.62	2.57	2.45	2.28	2.48
	1565 (5)		2.31	2.26	2.67	2.56	2.44
	uncertain (3)		2.08	1.78f	2.22b		
	0.50	49					
	rose (1565-65/6): 1565	3	1.69c	2.55	2.39		
				2.28		2.46	2.71
	portcullis (1565/6-6/7): 1566	14	2.5		2.08	2.46	2.71
			2.66	2.94	2.31	2.77	2.2
			2.47	1.99	2.23	2.7	
	lion (1566/7-67)				*		
	1566 (5)		2.64	2.17	2.62	2.58	2.45
			2.44	2,54	2.64	2.25	2.53
	1567 (8)					2.20	4.00
		(0.827)	2.17c	2.38	2.19		
		13					
	coronet (1567-70)						
	1567 (10)		2.16	2.74	2.6	2.48	2.57
	100/ (10/		2.79	2.21c	2.35	2.37	2.36
	1500 (15)		2.38	2.23	2.26b	2.41b	2.35
	1568 (15)						2.33
			2.55	2.44	2.42	2.1c	2.25
			2.34	2.25c	2.69	2.58	2.89
	1569 (15)		2.05c	2.41	2.72	2.49	2.67
	Transit Notes		2.38	2.57	2.48	2.43	2.74
			2.56	2.42	2.2	2.64	2.55
	F==0.29V					2.04	2.00
	1570 (3)		2.19	2.79	2.5		
	uncertain (1)		2.76c				
		44					
	castle (1570-2)						
	1570 (5)		2.83	2.73	2.49	2.2	2.39
			2.61	2.63		2.62	2.41
	1571 (9)				2.63	2.02	2.41
			2.53	2.59	2.53	2.15	
		14					
	ermine (1572-3)						
	1572 (21)		2.99	2.5	2.72	2.1	2.33
	1572 (23)		2.57	2.66	2.71	2.62	2.55
			2.75	2.71	2.16	2.69	2.24
			2.15	2.3	2.68	2.49	1.94
			2.42				
	1573 (6)		2.53	2.37	2.62	2.78	2.83
	1012		2.5				
		27	Acc - 420				
	30 TES 0						
	acorn (1573-4)					41.5	7.77
	1573 (5)		2.47	2.17	2.68	2.45	2.45
	1574 (1)		2.85				
	TANKAN PART	6					
	eglantine (1574-8)						
	egianine (1574-67		2.16	266	2 27	267	2.31
	1574 (11)		2.16	2.66	2.37	2.67	
			2.59	2.41	2.86	2.55	2.6
			2.66				
	1575 (11)		2.72	2.65	2.62	2.38	2.62
	THE PROPERTY OF		2.54	2.43	2.69p	2.7	2.52
			2.83		P		
	15-2765			2.200	264	260	20
	1576 (6)		2.71	2.29c	2.64	2.68	2.8
	EV SUMERO		2.05	12g 1902ma17	5 <u>02</u> 5722457		
	1577 (3)		2.5	2.63	2.71		
	and to over	31					

MEW HOARDS FROM SE	SVENTEE,	NIA-CEN	JUKIE	NOLAN	D	
plain cross (158–80)						
1578 (11)		2.68	2.73	2.87	2.29	2.6
		2.69	2.65	2.82	2.59	2.13
		1.93f	05	4.02	2.00	2.15
1579 (6)		2.71	2.67	2.57	2.54	2.46
1577 (0)		2.41	2.07	2.21	4.34	2.40
	17	2.41				
I (1500 1) 1500 (5)	17	A 0.5	2.52	2.40	2 /2	2.40
long cross (1580-1) 1580 (5)		2.25	2.52	2.49	2.67	2.48
1581 (11)		2.52	2.8	2.23	2.63	2.77
		2.49	2.33	2.21	2.71	2.48
		2.3				
	16					
sword (1581-82/3)						
1582 (8)		2.55	2.29	2.45	2.16c	2.6
(-,		2.5	2.37	2.7	2.100	2.0
	8	2.3	2.51	2.7		
hall (1590/2 92) 1590 (1)	o	2.52				
bell (1582/3–83) 1582 (1)		2.52				
1583 (1)		2.62				
	2					
A (1583–84/5)						
1583 (3)		2,15	2.29b	2.36		
1584 (5)		2.87	2.51	2.73	2.57	2.54
,	8					
escallop (1584/5-87) 1584 (4)	•	2.26c	2.12	2.77	2.88	
1585 (2)		2.43f	2.38	2.77	2.00	
1363 (2)	5	2.431	2.30			
(1.505, 00.00)	2					
crescent (1587-89/90)						
1587 (1)		2.43				
1589 (2)		2.43	2.48c			
	3					
hand (1589/90-91/2)						
1590 (4)		2.85	2.49	2.66	2.38	
1591 (6)		2.55	2.21	2.48	2.71	2.21
1071 (0)		2.2	0.0.	2		
	10					
tun (1591/2-94)	10					
1592 (6)		2.63	2.14	2.71	2.69	2.1.7c
1392 (6)			2,14	2.71	2.09	2.1.70
. 500		2.84				
1593 (12)		2.45	2.7	2.26	2.31	2.75
		2.01	2.55	2.35	2.56	2.55
		2.56	2.53			
1594 (1)		2.56				
	19					
woolpack (1594-95/6)						
1594 (5)		2.47	2.63	2.59	2.81	2.8
1595 (2)		2.78	2.83	2.07	2.0.	2.0
1555 (5)	7	2.70	2.0.7			
kov (1505/6 07/9)	,					
key (1595/6–97/8)	2	0.45	1.01-	2.0		
1596	3	2.45	1.81c	2.9		
anchor (1597/8–1600)	l	2.39				
cypher (1600-1) 1600	l	2.86				
1 (1601-2) 1601	3 2	2.05c	2.7	2.45		
1602	2	2.7	2.79			
2 (1602-3)						
1602	5	2.47	2.47	2.71	2.07	2.63
uncertain	18	2.25	2.7	2.26	2.05c	2.3
		2.39	2.64	2.07c	2.21	2.1
		2.26	2.37	2.15	2.13	2.65
					4.13	2.03
		2.65	2.26c	2.24c		
cross crosslet (12560-1)	!	1.6				
uncertain	ı	1.6				

Groat

James I (1603- First coinage (									
Shilling	first bust	thistle (160	03-4)	3	5.56	5.48	5.74		
Omming	second bust	thistle	03-4)	7	5.33	5.88	5.57	5.76	4.7
	second oust	unste		,	5.03	5.7	0.07	2.110	•,
		lis (1604-:	5)	11	5.5	5.54	4.89	5.61	5.67
		113 (1004".	3)	• • •	5.81	5.54	5.51	5.59	4.78
					5.98	5.54	3.31	3.39	4.70
	uncertain			l	5.23				
Civnanca	first bust	thistle: 160	13	3	2.96	2.72	2.57		
Sixpence	second bust	thistle: 160		1	2.44	2.12	2.31		
	second bust	1604	33		2.55				
				1 8	2.85	2.87	2.34	2.94	2.54
		lis: 1604		٥	2.83	2.4	1.97	2.94	2.54
C	(1604-10)				2.90	4.4	1.97		
Second coinage		1ia		12	5.2	5.40	5.81	5.62	4.50
Shilling	third bust	lis		12	5.3	5.49			4.52
					5.56	5.22	5.61	5.2	4.37
		(1605	6)	2	5.67	5.82	5.00		
		rose (1605	-0)	3	5.75	5.65	5.02	5.50	5 35
	fourth bust	rose		11	5.61	5.52	5.55	5.59	5.35
					5.12	5.75	5.15	5.57	5.43
					5.57		4.00		
		escallop (1		4	5.31	5.44	4.99	5.5	
		grapes (16	07)	8	5.78	5.69	5.55	5.77	5.7
					5.43	5.03	5.74		
		coronet (10	607–9)	1	4.97				
	fifth bust	coronet		4	5.41	5.58	4.81	5.69	
		key (1609-	-10)	I	4.62				
		mullet (16	11–12)	2	5.63	4.98			
	book (over to	in on obv.) (	1616–17)	1	5.26				
Sixpence	third bust	lis: 1604		6	2.68	2.44	2.02	2.65	2.15
					2.64				
		rose: 1605		2	2.34	2.88			
	fourth bust	rose: 1605	(1)		2.77				
		1606 (5)			2.56	2.82	2.94	2.71	2.72
				6					
		grapes: 166	07	ł	2.18				
		coronet: 16		Ţ	2.66				
		1608		Ţ	2.35				
Third coinage (	1619–25)								
Shilling	sixth bust	thistle (162	21-3)	1	5.67				
		lis (1623-4		5	6.05	4.87	5.04	5.78	5.82
		trefoil	.,	2	5.38	5.34		• • •	
Sixpence		thistle: 162	21	1	2.78	0.10			
эмрешее		lis: 1624	- ^	1	2.86				
		trefoil: 162	04	3	2.85	1.78c	2.75		
		uncertain:		1	2.85	******	2,10		
Uncertain coin	aoe	tarcer (Birr.	1027	•	2.05				
Shilling	uge			6	4.0c	4.24c	5.7	3.81c	4.77
Stiting				U	5.52	7.270	3.7	5.010	4.77
					5.52				
James VI, Sco	ttich coinage								
Six shillings	thistle: 1	610		ì	2.39				
Six similings	misne. 1	019		,	2.33				
Charles I (162	5_49)								
Tower mint	J-47)								
Half-crown	plume (1	630 1)	N2205	1	14.67				
Hair-crown			112203	1					
	rose (163		NICONO	1	14.34	14.70	146		
	hагр (16)		N2207	3	11.98c	14.79	14.6	14.16	
		s (1633–4)	N12000	4	12.99	13.21	14.8	14.16	
	bell (163		N2209	2	14.31	14.94	13.7	14.74	14.00
	crown (1	033-0)	N.2209	10	15.11	14.59	13.7	14.76	14.39
			NI2212	•	13.39	14.62	14.16	14,42	14.66
	crown	c 0)	N2210	2	12.54	14.7	142	145	1400
	tun (163	υ <b>-</b> -δ)	N2209		4	14.72	14.3	14.5	14.96

NEW HOARDS I	FROM SEVE	ENTEENTH-CEN	TURY E	NGLAN.	D		16
anchor (1638-9)	N2211	3	14.2	14 82	15.03		
triangle (1639–40)	N2211	6	14.91	14.81	14.45	13.99	14.55
trangle (1037–40)	142211	0	14.91	14.01	14.43	13.77	14.55
tuion ala	Mania	1.4		14.70	14.55	14.54	14.57
triangle	N2212	14	14.55	14.79	14.55	14.54	14.57
			14.66	15.18	15.07	14.35	14.22
			14.93	14.65	14.68	14.15	
star (1640–1)	N2211	1	14.53				
star	N2212	l	14.36				
star	N2214	2	15.05	14.75			
triangle in circle	N2214	37	14.16	14.01	14.85	13.18	15.39
			14.64	15.19	14.47	15.34	14.09
			14.3	14.93	14.64	14.68	14.15
			14.48	14.48	14.98	15.19	15.04
			14.68	14.97	14.47	14.75	15.24
			14.23	14.75	14.01	14.21	15.03
			12.82	15.0	14.76	15.12	14.22
					14.70	13.12	14.24
(7) (1642-4)			14.66	13.71	11.65	1400	14.00
(P) (1643-4)	N2211	12	13.74	14.87	14.63	14.23	14.95
			15.06	14.47	14.6	14.51	14.77
			14.95	14.71			
(R) (1644–5)	N2213	19	14.15	14.97	14.61	14.6	14.49
			15.19	14.82	14.93	14.89	14.33
			14.01	14.95	14.72	15.14	15.0
			14.0	14.9	14.99	14.58	
eye (1645)	N2213	11	14.38	14.3	14.45	13.0c	13.69
•			14.56	14.6	15.1	13.73	15.07
			13.6				
sun (1645-6)	N2213	11	14.89	14.86	15.23	14.75	14.38
2dii (10 /2 0)	11,22,25	• •	14.67	14.38	13,44	12.49c	
			14.98	14.50	15,44	12.470	14.23
enp	N2215	8	14.6	14.75	14.53	13.73	13.54
sun	192213	O	14.77	14.65	14.59	13.75	15.54
(1646 0)	210015	2					
sceptre (1646–9)	N2215	3	14.78	14.4	14.98		
uncertain, Groups III &		3	13.13c		11.95c		
lis (1625)	N2216	2	5.7	5.4¢			
heart	N2221	1	5.44				
plume	N2221	)	4.38	5.79			
harp	N2223	7	5.2	5.74	5.88	5.86	5.7i
-			4.6c	4.5c			
portcullis	N2223	10	5.33	5.61	5.96	4.55c	5.44
•			5.85	4.46c	4.41c	5.49	4,44c
bell	N2225	14	4.55	5.18	5.54	5.65	5.33
			5.68	4.68	5.51	5.96	4.67c
			5.57	5.69	5.71	5.38	
crown	N2225	26	5.45	5.68	5.65	5.56	5.77
Clown	142223	20	5.76	5.62	5.91	5.62	6.0
			5.79	5.83	5.6	5.72	5.8
			5.99	5.78	5.5	5.94	5.81
				5.7	5.86	5.57	5.28
			5.7	3.1	3.60	3.31	3.20
			4.7c				
crown	N2226	2	5.25	6.02			
tun	N2225	25	5.23	5.83	5.97	5.91	5.54
			5.32	5.57	5.85	5.58	5.66
			4.95c	4.71c	5.96	5.7	5.8
			5.54	5.9	5.72	5.82	5.91
			5.61	5.83	6.0	5.65	4.45
tun	N2226	2	5.84	5.59			
tun	N2227	3	5.62	5.67	5.82		
tun	N2228	4	5.93	5.72	5.16	5.76	
tun	N2229	2	5.94	5.77	20		
	N2227	1	5.44	0.77			
anchor		5	5,26	5.76	5.47	5.31	5.82
anchor	N2229	8				5.42	5.36
anchor	N2230	8	5.72	5.89	5.78	3.45	3.30
		-	5.87	5.99	5.85	5 07	4.88
triangle	N2230	7	5.55	5.94	5.64	5.87	4.00

Shilling

					5.68	5.6			
	triangle	N2231	8	26	5.78	5.4	5.75	5.73	5.81
	The state of the s				5.69	5.78	5.79	5.96	5.89
					5.83	5.87	5.77	5.87	5.05
					5.79	5.85	5.84	5.87	5.89
					5.92	5.88	5.39	5.87	5.83
					6.03				
	star	N2231	3	28	5.77	6.04	5.83	6.05	5.71
					5.73	5.94	5.82	6.07	6.33
					5.91	5.97	6.01	5.58	6.14
					5.62	5.74	6.03	5.85	6.04
					5.66	5.67	5.83	5.87	6.13
					4.72c	4.12c	5.87		
	triangle in circle	N2231	3	82	5.6	5.33	5.6	6.01	5.74
					5.65	5.7	5.96	5.86	5.88
					6.09	4.98	5.43	5.72	5.9
					4.89	4.95	5.96	5.73	5.76
					5.55	5.95	5.9	5.64	5.85
					6.02	6.0	5.44	6.01	5.82
					5.77	5.61	5.49	5.9	5.81
					5.59	5.6	6.16	6.13	5.48
					5.66	4.8c	5.3c	5.03c	5.8
					5.7	5.44	5.84	6.03	5.39
					5.83	5.74	5.91	5.37	5.89
					5.83	5.73	5.07c	5.85	5.89
					6.01	5.93	5.84	6.06	5.77
					5.99	5.81	5.21c	5.51	5.91
					5.78	5.42	5.46	5.53	5.9
						5.82		5.96	5.79
					5,82		5.79	5.90	3.19
	(D)	Magazi	33	10	5.64	5.35	E 76	E 01	6.06
	(P)	N2231		18	5.79	4.8	5.76	5.81	
					5.38	5.74	5.45		5.88
					5.5	5.7	5.34c	5.63	5.86
	ONC	N10001		20	5.34	5.99	5.69	5.2	£ 26
	(R)	N2231		20	5.55	5.72	5.49	5.3	5.36
					5.84	5.31	5.72	5.5	5.27
					5.77	6.02	5.66	5.66	5.29
				0	5.99	5.84	5.48	5.77	5.92
	eye	N2232		9	5.43	5.68	5.63	5.62	5.81
					5.8	5.68	5.35	6.08	5.00
	sun	N2232		18	5.76	5.39	6.13	5.41	5.98
					5.86	5.61	5.48	5.07c	5.38
					5.68	5.99	5.63	5.66	6.07
		U-salarananan		198	5.58	6.0	5.89	5.05	
	sun	N2233		6	5.72	5.07	5.84	5.95	5.64
		******			5.6	- 0	- 0	c 01	5 (7
	sceptre	N2234	ec :	5	5.74	5.2	5.8	5.91	5.67
	uncertain, group F (c.16	40-c.1643	5)	28	5.2c	5.72	5.52	5.52	6.06
					3.69c	4.56c	5.32c	6.0	4.9c
					6.15	5.84	4.92c	5.76	5.61
					5.81	5.85	5.76	5.54	5.2
					5.73	5.8	5.65	5.93	5.79
				7.1	5.99	5.88	5.58		
1	Briot, triangle	N2308	1324	1]31		2.64			
Sixpences	lis	N2235	1625	2	2.68	2.84			
	cross calvary	N2235	1626 (2)		2.68	2.74			
			1626 (light)		2.42				
				3					
	harp	N2240		2	2.44	2.84	2 22	2.2	
	portcullis	N2240			2.6	2.78	2.69	2.8	2.55
	bell	N2241		7	2.76	2.69	2.72	3.03	2.72

<sup>&</sup>lt;sup>33</sup> Noted by Michael Sharp, Baldwin's Auctions, no. 14, 13-14 October 1997, lot 399.

	crown	N2241	12	2.63 2.79 2.79	2.98 2.78 2.76	2.93 2.63	2.92 2.64	2.83 2.84
	tun	N2241	10	2.79	2.78 2.48	2.65	2.94	2.7
	****	112241	10	2.56	2.58	2.85	2.83	2.94
	anchor	N2244	4	2.47	2.88	3.3	2.57	
	triangle	N2245	3	2.96	2.74	2.54		
	triangle	N2246	3	3.16	2.36	2.74		
	star	N2246	6	2.81 2.96	2.88	2.77	3.05	2.3
	triangle in circle		7	2.75 2.86	2.42 3.04	2.12	2.57	2.94
	(P)		2	2.74	2.77			
	sun		1	2.30				
Charles I, Royalist								
Aberystwyth-Dovey		212251						
Halferown Oxford (1642–6)	crown	N2351	1	14.54				
Halfcrown	1642	N2411	1	14.63				
	1644	N2425, 5 pellets	1	14.2				
Shilling Bristol (1643–5)	1643	N2440	]	5.1				
Halfcrown	plume. 1645	N2492	l	14.35				
Shilling Exeter (1643–6)	1644	N2501	1	6.01				
Halfcrown 'W'mint (probably)	rose/Ex, 1644 Worcester) (1644)	N2572	1	14,15				
Halfcrown Uncertain, probably	'HC' mint (probably Ha	N2594 rtlebury Castle)	1	14.45				
Halfcrown	. ,	N2626	l	14.68				
Charles I, Scottish	coinage							
Thirty shillings		S5557	2	14.71	14.44			
Six shillings		\$5569	l	2.62				
Commonwealth		1640		15.03				
Halfcrown	sun	1649	l	15.03			4.4.0	
		1651	8	14.82	14.72	14.71	14.48	14.05
				14.92	14.88	15.04		
		1652	8	14.83	15.46	15.09	14.59	14.99
		1650		14.97	14.77	15.02	1100	15.07
		1653	76	14.33	14.45	14.75	14.89	15.06
				15.06		14.89	14.55	
				15.04	14.71	14.89	14.9	14.72
				15.09	14.82	14.8	14.24	15.12
				13.61	14.58	14.44	15.01	14,44
				13.52	14.45	15.49	14.97	14.98
				14.94	14.97	14.57	14.86	14.91
				14.77	15.31	15.16	14.47	14.9
				15.02	15.11	14.81	14.72	14.35
				14.2	15.49	14.75	13.82	14.97
				15.07	14,84	14.92	15.12	15.18
				14.35	14.6	14.77	14.73	15.23
				14.77	14.96	14.85	14.96	14.35
				14.59	14.93	14.88	15.16	14.95
				14.55	14.85	14.92	14.37	14.98
		1654	18	14.48 14.81	15,14	15.07	15.18	14.95

<sup>32</sup> Michael Sharp also noted a Chester and a West Country halfcrown, Baldwin's Auctions, no. 14, 13-14 October 1997, lots 412 and 419.

				14.68 14.69 15.2	15.17 14.78 13.66	14.46 14.39 15.22	14.29 14.83	15.14 12.56
		1655 1656	1 42	14.43 14.91 13.48	14.67	14.8 14.9	15.19 14.98	14.81 14.91
				14.68 13.47	14.98	14.78	14.55	14.86
				14.23 14.53	14.67	14.81	14.66	13.4
				14.8 14.51	14.39	14.82 14.83	14.38 14.99	14.73 14.56
		1657	2	14.1 14.84	15.09 14.81			
	uncertain date,	165–	7	15.92 14.86	14.18 15.23	15.07	14.92	15.21
	anchor	1658 1659	4 l	14.3 14.84	14.57	14.79	14.98	
		1660	6	14.8 14.65	14.74	14.59	14.73	14.55
	counterfeit	1653 (2) 1655 (2)		13.14 13.32	13.0 12.99			
		1656 (2)		14.38	14.68			
AL 2017		1640	6	5.01	c 00			
Shilling	sun	1649	2	5.91	5.92	5.62	6 12	502
		1651	14	5.88	5.94	5.67	6.13	5.83
				5.93	5.92	6.03 5.95	5.94 4.94	5.9
		1650	12	5.98	5.73 4.86	5.83	5.67	5.85
		1652	13	5.48		5.97		
				5.91	6.06	5.98	5.41	5.7
		1652	70	5.33	5.92		5.0	5.07
		1653	72	5.92	5.92	6.01	5.9	5.97
				5.85	5.29	6.0	5.66	6.11
				5.87	5.84	5.59	5.77	5.8
				4.99	6.22	5.85	5.9	5.55
				5.91	6.0	5.82	5.66	5.96
				6.02	5.63	5.9	5.98	6.19
				6.19	5.92	5.99	5.95	4.84
				5.9	5.8	5.94	6.18	6.06
				4.97c	6.03	6.18	5.89	6.09
				6.06	5.58	5.64	5.76 5.93	5.98
				5.88	5.6	5.77 6.13	6.03	5.99 5.79
				5.6 5.95	5.8 6.33	4.51c	5.8	5.83
				5.25	6.03	6.2	5.81	5.9
				5.12	6.1	0.4	5.61	3.7
		1654	31	5.97	5.7	5.68	5.92	5.91
		1034	31	5.77	5.78	5.9	5.74	5.72
				6.0	6.03	5.65	5.88	5.82
				6.14	5.95	5.67	6.06	5.64
				6.1	5.94	5.88	6.11	6.02
				5.51	5.88	5.79	5.97	5.92
				6.01	3.60	3.17	3.37	3.34
		1655	3	5.66	6.04	5.91		
		1656	31	6.0	5.75	5.49	5.88	5.61
				5.85	5.65	5.65	6.0	6.1
				5.8	5.86	5.66	5.74	5.98
				5.49	5.87	5.62	5.84	5.68
				5.64	6.11	5.94	5.77	5.66
				5.38	5.78	5.69	5.14	5.99
				5.68	2.70	5.07	<i>⊋.</i> 1⊤	2.77
	uncertain date, 165-			5.66	6.1	5.41	5.65	5.69
	ansoliani date, 105-			5.00	U. 1	<i>&gt;.</i> →1	5.05	2.07

				6.01 5.05	5.8	5.99	5.42	5.95
			11					
	anchor	1658	6	5.34	6.0	5.9	5.25	5.83
				5.95				
		1660	4	4.83	5.5	5.58	5.81	
Sixpence	sun	1651	2	2.66	2.68			
		1653	2	2.99	2.96			
		1654	7	2.68	2.6	2.88	2.86	2.67
				2.6	2.09			
		1656	5	2.97	2.97	2.65	3.0	2.75

## 7. Burton Overy, Leicestershire

This find was discovered in 1994 under the attic floorboards of a farmhouse. It was declared to be Treasure Trove at an inquest on 30 November 1994 and was subsequently acquired by Leicestershire Museums. It consists of 259 coins, with just two denominations represented, half-crowns and crowns, to a face value when deposited of £35 5s.

Burton Overy lies seven miles south-east of Leicester, on the eastern slopes of the Sence valley. The main road from Market Harborough to Leicester passes within a mile of the village. In 1670 there were sixty two households in the village, and in 1676 102 communicants.<sup>33</sup>

Hoards from Charles II's reign are not particularly common. Such as do occur are often found within, or in close proximity to, a building: these include the present hoard and the Upwey, Bampton, Chilton Foliat I and Crediton hoards: there are particular similarities to the location of the Crediton hoard, found under the floorboards of a third-floor room abutting the parish church.<sup>34</sup> It seems to be the case that broadly from the Civil War and Commonwealth period there is a marked decline in the practice of concealing hoards in the open air: hoards from the Restoration period onwards are more likely to be found in buildings, usually private homes. Like Burton Overy, Bampton and Chilton Foliat consisted of just half-crowns and crowns. Within the ten or so comparable hoards deposited under this king, there appears to be one group which belongs towards the end of the reign, c. 1680-3, in the period of the Popish Plot and the Exclusion Crisis, consisting of the Wraxall, Chilton Foliat I, Cople and Crediton hoards. 35 The Burton Overy hoard seems, however, to belong with another small cluster of hoards deposited rather earlier, in 1673 or soon thereafter, the others being the Bampton, Oxon, and Staple, Kent, hoards.<sup>36</sup> The two most significant national factors of 1673 were the Test Act, which effectively barred Catholics from public office (including the king's brother James, duke of York); and the Third Dutch War, in which England supported France against the United Provinces. However, although the Dutch were able to raid towards the Thames, no serious incursion occurred, or even looked likely: not, one might think, sufficient cause for alarm in Leicestershire or Oxfordshire (unlike, for example, Pepys' reaction to the Medway crisis during the Second Dutch War in 1667<sup>37</sup>).

Whatever the circumstances behind the Burton Overy find, it corresponds particularly closely to the Bampton hoard. This also consisted solely of half-crowns and crowns, ending in 1673, and was discovered within a building, in this case under the hearth-stone of a farmhouse.<sup>38</sup> Hawkins suggested that the Bampton hoard represented gradually accumulated savings, and there is a temptation to follow suit with the very similar Burton Overy find. However, the evidence of the weights of the latter material indicate some caution here, as it seems to suggest that this is not an

<sup>33</sup> VCH Leicester vol. 5, edited by J.M. Lee and R.A. McKinley (1964), pp. 68-9.

<sup>&</sup>lt;sup>34</sup> For details see G.K. Jenkins, 'The Upwey Treasure Trove', NC<sup>6</sup> 9 (1949), 261–2; E. Hawkins, 'A find of English coins at Bampton', NC 14 (1852), 84–5; M. Jessop Price, 'Treasure Trove at Chilton Foliat', NC<sup>7</sup> 7 (1967), 199–201; H.A. Grueber, 'A find of coins at Ctediton, North Devon', NC<sup>3</sup> 17 (1897), 159–72.

<sup>&</sup>lt;sup>35</sup> For summaries of these hoards which bring out these groups, see L.D. Brown and M. Dolley, *Coin Hoards of Great Britain and Ireland 1500–1967* (London, 1971), pp. 34–5; for Wraxall, see B.J. Cook, 'Four seventeenth century treasure troves', *BNJ* 60 (1990), 87–98.

<sup>36</sup> Brown and Dolley, pp. 34-5.

<sup>37</sup> The Diary of Samuel Pepys, VIII (London, 1974), pp. 262-3, 280.

<sup>38</sup> E. Hawkins, 'A find of English coins at Bampton', NC 14 (1852), 84-5.

inevitable conclusion for such denominationally restricted hoards. The reign averages listed below show a steady rise in weight up to the time of deposit, not what might be expected for a deliberate build up of good quality material over time. The weights of the half-crowns of Charles I, for instance, are no different from those in the Blackfriars Bridge hoard, deposited more than ten years earlier, and somewhat below the level of those in substantial hoards from the 1640s, such as Caunton, Ryhall, Ashdon, Priorslee and Soham (see Appendix, p. 170 below). Another useful comparison can be made with the Congleton hoard, part of which is included in the accompanying weight table. Like the Civil War hoards just mentioned, Congleton included coin from a range of denominations (sixpence to half-crown), as well as milled crowns and half-crowns. It was deposited a few years before Burton Overy, as its latest coins date to 1670, but its coins have a consistently better weight. Thus, the evidence of Burton Overy would not indicate that a single denomination hoard is necessarily going to consist of better quality material: it can simply reflect selection by denomination, probably (in this case) at one particular point in time, not by the quality of its standards.

Weight summary										
		Burton Ove	ery	Congleton						
	l	2	3	1	2	3				
Hammered coinage										
Halfcrowns James I	13.79	7	91.9	14.41	17	96.1				
Charles I										
lis-tun	13.93	34	92.9	14.86	82	99.1				
anchor-star	14,47	35	96.5	14.74	75	98.3				
triangle-in-c.	14.52	48	96.8	14.66	89	97.7				
(P)-sceptre	14.41	71	96	14.68	202	97.9				
Charles II	14.63	32	97.5	14.93	16	99.5				
Milled coinage										
Crowns	29.94	8	99.8	29.73	7	99.1				
Half-crowns	14.86	15	99.1	14.96	10	99.7				

#### CATALOGUE

All coins are half-crowns, unless otherwise stated.

James I Third Coinage								
	thistle (1621-3)		4	14.57	14.48	11.28	12.21	
	lis (1623-4)		ĺ	14.89			12.2.	
	trefoil (1624)		2	14.26	14.84			
	101011 (1021)		~	14.20	14.04			
Charles I Tower mint Group II								
•	plume (1630-1)	N.2204	1	11.62				
	harp (1632–3)	N.2207	2	14.55	14.25			
	portcullis (1633-4)	N.2207	2 5	14.63	14.69	14.68	11.07	14.53
	bell (1634-5)	N.2209	4	14.8	14.68	14.73	10.74	
	crown (1635-6)	N.2209	10	12.83	14.98	14.97	14.53	14.8
				15.18	14.31	14.92	14.88	14.93
		N.2210	2	14.85	11.91			
	tun (1636-8)	N.2209	10	11.84	14.73	14.33	14.27	15.09
	,			11.86	14.95	12.96	13.91	14.93
	anchor (1638-9)	N.2211	5	14.74	14.14	14.94	14.4	14.72
	triangle (1639-40)	N.2211	Ī	14.64				
		N.2212	17	13.09	15.12	15.21	14.73	14.6
				12.3	15.07	14.86	14.39	14,79
				14.67	13.07	12.81	14.75	14.75
				14.74	15.16			
	star (1640-1)	N2211	11	14.83	14.85	14.64	15.08	13.3

				14.8	14.85	14.54	14.95	14.12
		N2212	1	14.81 14.64				
	im uncertain	N2211		2	11.23	14.45		
	triangle-in-circle (1641-3	) N2214	48	14.5	14.44	14.68	14.69	14.67
				14.57 14.86	15.06 14.48	15.07 14.45	14.13 14.25	15.04 14.9
				14.42	14.74	14.64	12.86	14.91
				14.85	14.55	15.09	13.99	14.85
				13.98	13.74	14.6	14.82	14.88
				14.41	14.84	14.01	14.41	14.88
				14.94	14.63	14.69 14.52	14.92 12.38	14.86 13.95
				14.45 13.9	14.76 15.22	14.32	12.38	13.93
	(P) (1643-4)	N2213	18	14.63	13.35	14.69	15.2	15.1
	(,)(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			14.65	14.66	14.52	15.22	14.63
				13.96	15.12	15.28	14.88	13.2
				13.64	14.92	14.2		12.00
	(R) (1644–5)	N2213	22	14.85	13.42	14.47 14.7	14.97 14.55	13.99 14.72
				13.7 14.71	14.39 14.78	15.12	14.52	13.57
				14.28	14.64	14.68	14.09	14.83
				14.80	14.84			
	eye (1645)	N2213	11	12.52	14.4	11.5	14.72	14.3
				14.77	14.02	14.72	14.44	14.57
	(1/3/ /)	NI2012	18	15.08 14.38	15.02	15.23	14.5	14.01
	sun (1646–6)	N2213	18	14.43	15.02	12.35	14.7	14.36
				14.65	15.43	13.87	14.78	14.63
				14.78	13.7	14.88		
		N2215	5	14.6	15.02	12.84	11.44	14.27
	sceptre (1656-7)	N2215	2	12.75	14.85	14.40	12.77	10.24
	im uncertain	N2213	14	12.44 14.57	11.81 14.74	14.48 15.45	13.77 14.78	12.34 15.14
				14.96	14.68	12.61	13.5	13.14
		N2214	4	14.99	14.4	15.06	14.31	
		N2215	1	14.67				
Nicholas Briot								
C. Hammered	issue (1638–9)	N2307	1	14.91				
Oxford mint	1640	N2409	1	14.61				
	1642 1643	N2409 N2414	1	14.92				
	1644	N2423	ì	13.39				
'SA' mint								
		N2610	1	[4.19				
Scotland								
Third coinage 30s.	V (Falconer's anon)		1	14.61				
508.	Y (Talconer 3 anon)		•					
Charles II								
Hammered issu	ie			140				
		N2760	1 31	14.9 14.89	14.41	14.86	12.53	12.31
		N2761	31	13.94	14.46	14.89	15.02	14.74
				14.73	15.05	15.21	14.39	14.82
				14.88	14.7	14.67	14.68	15.1
				15.0	14.93	14.93	15.01	14.76
				14.91	14.66	14.34	15.2	14.58
Milladia				14.83				
Milled issue crown	1662		1	29.83				
CIOWII	1663		2	30.08	29.92			
	1664		1	29.61				
	1671		1	29.95	20.02			
	1672		2	30.02	29.83			

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#### NEW HOARDS FROM SEVENTEENTH-CENTURY ENGLAND

	1673	Ĩ	30.29				
halfcrown	1663	Ī	14.89				
	1664	2	14.83	14.89			
	1668	Ĭ	14.56				
	1670	6	14.9	14.81	15.03	14.96	14.76
			14.9				
	1671	4	14.98	14.72	14.89	14.87	
	1673	Ê	14.88				

#### APPENDIX

It is only relatively recently that metrological information for seventeenth-century currency has begun to be systematically recorded. The following table lists the average weights of denominations by reign of the principal issues found in seventeenth-century hoards, where published reports or information on file preserves this. Information is taken from the lists in the article above, and the following.

Barrow Gurney, Revesby, Caunton, and Wraxall: B.J. Cook, 'Four seventeenth century treasure troves', BNJ 60 (1990), 87–98.

Bull Wharf: Gareth-Williams, 'A Jacobean silver hoard from Bull Wharf, London', BNJ 67 (1997), 105-8.

Warmsworth: for brief listing see 'Coin Hoards 2000', NC 2000; full record to be published by Doncaster Museum, which acquired the hoard; meanwhile, information is on file at Doncaster Museum and the British Museum.

Wortwell: J.A. Davies, 'A Civil War coin hoard from Wortwell, South Norfolk', Norfolk Archaeology 42, pt 1 (1994), 84-9.

Ryhall: T.H.McK. Clough and B.J. Cook, 'The 1987 Ryhall Treasure Trove', BNJ 58 (1988), 96-101.

Winchcombe: for brief listing, see 'Coin Hoards 1999', NC 1999, p. 355; full report to be published by Gloucester Museum, which acquired the hoard; meanwhile information also on file at the British Museum.

Winsford and Burghclere: J.E. Cribb, 'Two seventeenth-century hoards and their evidence of wear', BNJ 48 (1978), 113-17.

Grewelthorpe: C.P. Barclay, 'A Civil War hoard from Grewelthorpe, North Yorkshire', BNJ 61 (1994), 76-81.

Breckenbrough, Soham, Ashdon, Guildford, Priorslee, and Wyke: Edward Besly, English Civil War Coin Hoards. British Museum Occasional Paper No. 51 (London, 1987).

Middleham: C.P. Barclay, 'A Civil War hoard from Middleham, North Yorkshire', BNJ 64 (1994), 84-98.

Tregwynt: E. Besly, 'A Civil War hoard from Tregwynt, Pembrokeshire', BNJ 68 (1998), 119-36.

Sibbertoft: Mark Curteis, in 'Coin Hoards 1996', NC 156 (1996), 296-7.

Redditch: E. Besly, 'Redditch Treasure Trove', Transactions of the Worcestershire Archaeological Society, 3rd ser. 10 (1986), 83-9.

Congleton: full report to be published by Norton Priory Museum, which acquired the hoard; meanwhile information is on file at the British Museum.

Ashton: Mark Curteis, in 'Coin Hoards 1996', NC 156 (1996), 298-300.

Broadwoodwidger: S.A. Castle, 'The Broadwoodwidger (Devon) Treasure Trove', BNJ 43 (1973), 146-51.

Chancery Court: on file at the British Museum.

## NEW HOARDS FROM SEVENTEENTH-CENTURY ENGLAND

## Average weights

Hoard/date of												
latest coins	Sixpenc	e			Shilling	3			Half-	crown		Crown
	EI	Л	CI	CW	EI	Л	CI	CW	CI	CW or CII ham	CII milled	СП
Barrow Gumey, 1606	2.88				6.01	5.88						
Bull Wharf, 1613-15	2.62	2.79			5.37	5.77						
Warmsworth, 1632-3	2.73	2.74			5.68	6.09						
Revesby, 1-in-c	2.70	2,74	3.04		5.57	5.27	5.84					
Wortwell, t-in-c	2.39	2.68	2.93		5.69	5.64	5.89		14.88			
Dersingham, t-in-c					5.66	5.69	5.9					
Ryhall, t-in-c	2 69	2.77	2.94		5.38	5.70	6.01		14,94			
Wroughton, t-in-c/1634	2.71	2.85	2.98		5.55	5.73	6.01		14.91			
Caunton, (P)/1643	2.64	2.73	2.92		5.50	5.59	5.90		14.72			
Winsford, (P)/1643	2.57	2.72	2.88		5.2	5.46	5.81		14.45			
Grewelthorpe (P)	2.59	2.63	2.88		5.33	5.38	5.83		14.42			
Breckenbrough (P)/1644	2.59	2.67	2.82		5.28	5.41	5.59		14.35			
Totnes, (P)/1644	2.67	2.77	3.0		5.67	5.7	5.97		14.88			
Sibbertoft, (R)	2.65	2.11	2.99		5.82	5.53	5.95		14.34			
Winchcombe, (R)/1643	2.73	2.72	2.67		5.74	5.93	5.98		14.46			
Ashdon,(R)/1644	2.69	2.75	2.95		5.54	5.63	5.95		14.92			
Chilton Foliat, (R)	2.69	-	3.0		5.78	5.64	5.98		14.95			
Priorslee, sun/1646	2.74	2.73	2.91		5.65	5.58	5.89		14.88			
Middleham A&B, sun	2.51	2.58	2.87		5.04	5.20	5.71		14.51			
Middleham C, sceptre	2.63	2.72	2.88		5.97	5.58	5.97		14.86			
Wyke, sceptre	2.65	2.70	2.92		5.59	5.57	5.81		14.71			
Tregwynt, sceptre	2.64	2.72	2.83		5.42	5.6	5.85		14.74			
Guildford, sceptre					5.75	5.82	5.91		14.93			
Soham, 1649	2.7	2.75	3.01		5.62	5.75	5.92		14.85			
Blackfriars Bridge,1660	2.45	2.59	2.75	2.75	5.4	5.38	5.64	5.77	14.45	14.72		
Burghelere, 1660-2	2.55	2.58	2.67		5.39	5.51	5.69		14.46	14.9		
Redditch, 1660-2					5.23	5.48	5.62	6.02	14.15	14.74		
Congleton, 1670	2.61	2.65	2.83		5.51	5.59	5.82	5.93	14.72	14.93		29.73
Burton Overy 1673									14.36	14.63	14.86	29.94
Ashton,1676	2.15	1.99	2 36		3.96	3.69	4.0		11.58	10.82		
Wraxall, 1677	2.53	2.61	2,73		5.62	5.59	5.71				14.67	29.75
Broadwoodwidger, 1685	2.47	2.52	2.73		5.19	5.46	5.65		14.08	13.51	14.7	
Chancery Court, 1696	2.56	2.58	2.74		5.17	5.15	5.48	4.99	13.09	13.32	14.52	

## Average weights as percentage of official weight standard

Hoard/date of latest coins	Sixpence	ř.		Shillin	ng.		Half-	crown		Crown	
	EI	11	Cl	EI	Л	CI	CW	CI	CW or CII	CII milled	CII milled
Barrow Gurney, 1606	96				100.1						
Bull Wharf, 1613-15	87.3	93			89.5	96.2					
Warmsworth, 1632-3	91	91.3		94.7	101.5						
Revesby, t-in-c	90	91.3	101.3	92.8	87.8	97.3					
Wortwell, t-in-c	79.8	89.3	97.7	94.8	94	98.1		99.2			
Dersingham, t-in-c				94.3	94.8	97.3					
Ryhall, t-in-c	89.7	92.3	99.3	89.7	95	100.2		99.6			
Wroughton, t-in-c/1634	90.3	95	99.3	92.5	95.5	100.2		99.4			
Caunton, (P)/1643	88	91	97.3	91.7	93.2	98.3		98.1			
Winsford, (P)/1643	85.7	90.7	96	86.7	91	96.8		96.3			
Grewelthorpe (P)	86.3	87.7	96	88.8	89.7	97.2		96.1			
Breckenbrough (P)/1644	86.3	89	94	88	90.2	93.2		95.7			
Totnes, (P)/1644	89	92.3	100	94.5	95	99.5		99.2			
Sibbertoft, (R)	88.3	70.3	99.7	97	92.2	99.2		95.6			
Winchcombe, (R)/1643	91	90.7	89	95.7	98.8	99.7		96.4			
Ashdon, (R)/1644	89.7	91.7	98.3	92.3	93.8	99.2		99.5			
Chilton Foliat, (R)	89.7	3	100	96.3	94	99.7		99.7			
Priorslee, sun/1646	91.3	91	97	94.2	93	98.2		99.2			
Middleham A&B, sun	83.7	86	95.7	84	86.7	95.2		96.7			
Middleham C, sceptre	87.7	90.7	96	99.5	93	99.5		99.1			
Wyke, sceptre	88.3	90	97.3	93.2	92.8	96.8		98.1			
Tregwynt, sceptre	88	90.7	94.3	90.3	93.3	97.5		98.3			
Guildford, sceptre				95.8	97	98.5		99.5			
Soham, 1649	90	91.7	100.3	93.7	95.8	98.7		99			
Blackfriars Bridge, 1660	81.7	86.3	91.7	90	89.7	94	96.2	96.3	98.1		
Burghclere, 1660-2	85	86	89	89.8	91.8	94.8		96.4	99.3		
Redditch,1660-2				87.2	91.4	93.7	100.2	94.3	98.2		
Congleton, 1670	87	88.3	94.3	91.8	93.2	97	98.8	98.1	99.5		99.1
Burton Overy 1673								95.7	97.5	99.1	99.8
Ashton, 1676	71.7	66.3	78.7	66	61.5	66.7		77.2	72.1		
Wraxall, 1677	84.3	87	91	93.7	93.2	95.2				97.8	99.2
Broadwood widger, 1685	82.3	84	91	86.5	91	94.2		93.9	90.1	98	
Chancery Court, 1696	85.3	86	91.3	86.2	85.8	91.3	83.2	87.3	88.8	96.8	

# JOHN GREGORY HANCOCK AND THE WESTWOOD BROTHERS: AN EIGHTEENTH-CENTURY TOKEN CONSORTIUM

#### D.W. DYKES

In the Spring of 1821 Matthew Robinson Boulton, busying himself with the provision of a mint for the East India Company in Calcutta and the engagement of suitable staff for its installation and operation, received a letter [Fig. 1] from the die-sinker and medallist John Westwood, junior.<sup>1</sup>

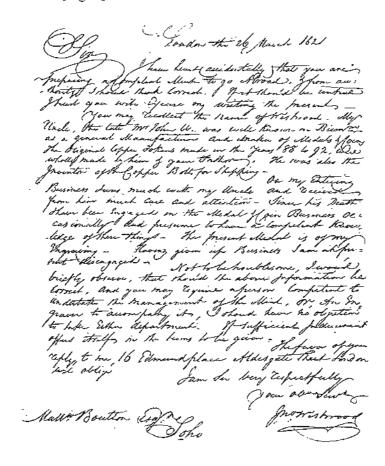


Fig. 1

### Note

This sketch of John Gregory Hancock and the brothers, John and Obadiah Westwood, and their relationship in the manufacture of eighteenth-century tokens formed the second part of my 1999 Presidential Address. The original text has been slightly extended and footnotes have been added but it still pretends to being no more than a sketch

My thanks are due to Birmingham City Library Services for allowing me to quote from the Matthew Boulton Papers and to reproduce material in their care (figs. 1, 2 (text), 6, 7 (text) and 10). Mr Nicholas Kingsley, the Birmingham City Archivist, and his staff have been unfailing in their assistance as has Mr Paul Taylor of the Local Studies and History Department.

I am grateful also to the Trustees of the British Museum for their permission to reproduce the illustrations in figs. 4 and 5; and to the Smithsonian Institution in respect of fig. 9.

#### Abbreviations

D&H - R. Dalton and S.H. Hamer, *The Provincial Token-Coinage of the 18th Century* (Privately printed in 14 parts 1910–18); *BHM* - Laurence Brown, *British Historical Medals 1760–1960*, Volume 1 (London, 1980), D&W - W.I. Davis and A.W. Waters, *Tickets and Passes of Great Britain and Ireland* (Learnington Spa. 1922); MBP - The Matthew Boulton Papers deposited in the Birmingham City Archives (Birmingham Central Library).

<sup>1</sup> MBP, 261/73 (26 March 1821).

Westwood, born in Birmingham in 1774, had spent his formative years there but since the turn of the century he had lived in Sheffield, then Lichfield, and latterly London. Not for the first time had this talented artist fallen upon hard times. Now middle-aged, Westwood had decided to give up his decaying business of engraving dies for medals and box lids, and, as he put it rather lamely, he was 'disengaged'. He had, however, heard a rumour that the Birmingham entrepreneur was 'preparing a compleat [sic] Mint to go Abroad'. Should Boulton thus need the services of 'a person competent to undertake the management of the Mint, or, An Engraver to accompany it', he was anxious to register his interest, for he had no 'objection to take either department if sufficient inducement offers itself in the terms to be given'.

In the event Westwood's importunate approach received no encouragement from Soho, but what is more to our purpose here is what he wrote in introducing himself to the younger Boulton:

You may recollect the name of Westwood. My Uncle, the late M<sup>r</sup> John W. was well known in Birm<sup>m</sup> as a general Manufacturer and maker of Medals & Coins. *The original Copper Tokens made in the years 88 to 92 were wholly made by him & your Father* [my italics].

Even though these words were written years after the events to which they refer, it is surprising to find that Charles Pye in the 1801 (quarto) edition of his *Provincial Coins and Tokens*<sup>3</sup> attributes to the Westwood family as *manufacturers* – John, senior, his brother Obadiah and the latter's son, John (the writer of the letter) – a mere handful of tokens all of which fall outside the period specified in the letter: to 'J. Westwood' the original [1786] 'Monogram' pattern for Thomas Williams's 'Druid Tokens' [Plate 1, 1; D&H: Anglesey 1]; to 'O. Westwood' a halfpenny (1794) for James Lackington, the London bookseller [Plate 31, 4; D&H: Middlesex 351]; and to 'Westwood' (without initials) the Sherborne halfpenny (1793) of the banking firm of Preter, Pew & Company [Plate 44, 7; D&H: Dorset 7] and the 'Washington/Ship' halfpenny (1793) [Plate 51, 10; D&H: Middlesex 1051].

Pye, admittedly, refers to the younger Westwood's fraudulent copies – of the 'Monogram' Anglesey penny and the Southampton 'St Bevois' halfpenny, for instance – and his specious pennies, halfpennies and 'half-halfpennies' based on genuine tokens, but only to castigate them in his 'Advertisement' and the 'Observations' to his 'Index'. But these concoctions are irrelevant to our immediate problem: the conundrum of reconciling the younger Westwood's claim that the legitimate tokens of the period 1788 to 1792 were 'wholly' made by his uncle and Matthew Boulton with what is traditionally regarded as the authoritative contemporary account of mainstream eighteenth-century token-making, certainly as far as Birmingham is concerned. After all Matthew Boulton's son, even after the lapse of thirty years, would still have been only too aware of the elder John Westwood's business ventures and it would not have served the nephew's current interests to be shown to have been too much of a liar.

At this point one should perhaps pause to see what Pye actually has to say about the tokens produced in Birmingham between 1788 and 1792. Apart from the strikings attributed to Thomas Williams and then to Matthew Boulton (which, except for his coining for Williams and Wilkinson, are verifiable from the Matthew Boulton Papers), and a few, from 1791, given to Peter Kempson, William Lutwyche and William Mainwaring, all are credited to 'Hancock'. And, if one is to believe Pye, 'Hancock' – the die-sinker John Gregory Hancock – was a manufacturer of tokens on

<sup>&</sup>lt;sup>2</sup> Young Westwood had twenty years earlier (29 January 1800) tried to dispose of some of his dies to Boulton's father on the ground that his business was then 'so very indifferent' [MBP:261/72]. His medallic work effectively came to an end in 1821 with his medal of Sir Robert Wilson [BHM 1168]; there is no reason to associate BHM: 1317 [1827] (or BHM: 928 [1817]) with Westwood.

<sup>3</sup> Provincial Coins and Tokens issued from the Year 1787 to the Year 1801, engraved by Charles Pye, Birmingham (Birmingham, 1801)

<sup>&</sup>lt;sup>4</sup> Reference is made to some of these pieces, for which John Westwood, junior achieved contemporary notoriety, in the 'Observations' to the 'Index' while the 'Advertisement' chose to warn collectors how 'Mr. J. Westwood, junior, late of Birmingham' had copied 'the Monogram Anglesey penny, Southampton halfpenny, and several other tokens... To the ingenuity of the same person the public is indebted for a series of half halfpence, as he has called them, and some halfpence and pence – the prototypes of which are genuine halfpenny tokens': Pye, as in n. 3, p. 4.

<sup>&</sup>lt;sup>5</sup> William Mainwaring (ob. 1794) was not a manufacturer as such; a token engraver he worked for Lutwyche who bought his dies after his death: William Robert Hay quoted in D.W. Dykes, 'Who was R Y? Searching for an Identity', BNJ, 67 (1997). 120.

a considerable scale producing, during this period, at least twelve series of provincial coins totalling many tons of copper and hundreds of thousands of tokens. Taking them in date order the 'proprietors' of these tokens, as Pye describes the issuers, were:

John Wilkinson – 6+ ton (1789-92) [Plate 48, 3, 4, 5, 8, 9 and 10; D&H: Warwickshire 424-30, 432-8 and 448-52];<sup>6</sup>

Roe & Co of Macclesfield – 11 ton (1789, 1790–92) [Plate 36, 1, 2 and 3; D&H: Cheshire 9, 10–15 and 16–59];

Walter Taylor & Co of Southampton – 'a few specimens' (1790) [Plate 45, 1; D&H: Hampshire 84]; T & A Hutchinson of Edinburgh – 10 ton (1790–92) [Plate 18,3; D&H: Lothian 23–30, 31–7 and 41–6];

Jonathan Garton & Co of Hull – 5 ton (1791) [Plate 23, 6; D&H: Yorkshire 17–21];

Thomas Worswick & Son of Lancaster – 5 ton (1791–92) [Plate 26, 2]; D&H: Lancashire 9–28];

Richard Paley of Leeds – 5 ton (1791) [Plate 26, 3; D&H: Yorkshire 43–52];

Thomas Clarke of Liverpool – 10 ton (1791–92) [Plate 27, 4 and 5; D&H: Lancashire 61–78 and 95–9];

John Kershaw of Rochdale - 2 ton (1791) [Plate 43, 1; D&H: Lancashire 140];

John Morgan of Carmarthen – 5 ton (1792) [Plate 13, 5; D&H: Carmarthenshire 5–7];

Samuel Kingdon of Exeter – 5 ton (1792) [Plate 19, 6; D&H: Devonshire 1–3];

William Absolon of Yarmouth - 5 cwt (1792) [Plate 50, 1]; D&H: Norfolk 51-2].

But should Pye's catalogue be taken at face value? Remarkable as this is, it is not absolutely free of error; no pioneering work of this kind, commanding such a wealth of detail, ever can be. Nevertheless, for Birmingham manufacture the engraver-editor could bolster up his own not inconsiderable knowledge with the advice of at least two major local collectors and the testimony of individuals directly connected with the token-making business, including Hancock himself. Pye's evidence, therefore, is not to be dismissed lightly. Yet was Hancock, acknowledged to have been a masterly engraver of tokens – Thomas Sharp, for example, deemed his productions as 'preeminent' among those of the Birmingham die-sinkers producing tokens for general circulation? – also a manufacturer of tokens and on such a large scale? For, if one accepts Lutwyche's production figures, quoted by Sharp, <sup>10</sup> as something like 103,000 halfpennies to the ton this would mean that, in a period of less than three years, Hancock produced well over six and a half million tokens.

Despite the recurrence of his name in Pye's catalogue, Hancock is now, like so many of his fellows, an elusive figure. A recent commentator has maintained that he was a die-sinker and stamper with a family toyman's business in Hospital Street, Birmingham between 1780 and 1800, responsible among other things not only for tokens and quality medals but also for the petty loyalist medalets signed I H & Co. These are notions, though, that do not really bear critical examination. It

<sup>&</sup>lt;sup>6</sup> It is difficult to disentangle the 'Hancock' pieces from those struck by Boulton and it is virtually certain that Wilkinson's 'Ship' halfpence and silver 3/6's [Plate 48, 6; D&H: Warwickshire 336–7] were struck by 'Hancock' [Westwood].

The D&H references given here and in the list on page 179 exclude trial pieces, patterns and proofs.

Walter Taylor was a naval contractor and block and tackle maker joined with Richard Moody, banker, in a brewery concern; the Hutchinsons, factors and merchants; Jonathan Garton, a linen draper; the Worswicks, West India merchants and bankers; Richard Paley, a soap boiler and property developer; Thomas Clarke, a chandler; John Kershaw, a woollen merchant; John Morgan, an iron master and banker: Samuel Kingdon, a woollen merchant; and William Absolon, a china and glass dealer.

<sup>&</sup>lt;sup>8</sup> Charles Pye (1749–1830) had based his first catalogue, *Provincial Copper Coins or Tokens* (London and Birmingham, 1795) on his own collection. For his 1801 catalogue he relied, additionally, on ready access to the advice and cabinets of two major contemporary token collectors: the Birmingham attorneys, George Barker (1776–1845) and Thomas Welch (1774–1814). The latter, Thomas Sharp tells us, was responsible for the 'Advertisement' or preface to Pye's 1801 catalogue: Thomas Sharp, *A catalogue of Provincial Copper coins ... in the collection of Sir George Chetwynd, Baronet* (London, 1834), p. ix, Miss Banks thought that Welch, who had 'made' the 1801 catalogue, had probably 'advanced money' on the venture: Ms. note on letter cover in Miss Banks's copy. Royal Mint Library,

<sup>9</sup> Sharp, as in n. 8, v.

<sup>&</sup>lt;sup>10</sup> Sharp, as in n. 8, ii; Sharp actually quotes Lutwyche's figure as 103,040 halfpence to the ton (the notional weight standard of Tower halfpence, i.e. 46 tokens to the lb. avoirdupois).

<sup>&</sup>lt;sup>11</sup> Michael Mitchiner, Jetons, Medalets and Tokens: British Isles, circa 1558 to 1830 (London, 1998), pp. 1753, 1996, 2020 et seqq. Pace Mitchiner (following L. Forrer, Biographical Dictionary of Medallists (London, 1923), VI, p. 398), Hancock does not

A more plausible suggestion is that Hancock was related to Robert Hancock (1730–1817), the mezzotinter, who, in the middle years of the century, was an engraver with the Battersea and Worcester porcelain works. While this idea has its attractions, since Robert Hancock is said to have come originally from Staffordshire and there are vague hints of possible family connections, it may arise simply from a confusion of names. For, in reality, John Gregory Hancock was the son, probably the younger of two brothers, of quite another Robert Hancock (1714?–92), also an engraver, but long associated with the enterprises of the Boulton family. Not unnaturally with such a background, both John Gregory, born about 1750, and his brother William were apprenticed to the hardware manufactory of Boulton and Fothergill in 1763, shortly after its establishment and the year before its move to Soho. 13

John Gregory is said to have maintained his links with Soho for some time after the expiration of his indentures. William, obviously well-regarded by the manufactory, was persuaded back to Soho from Sheffield as a head of the plating department in 1775. He was still there in 1783. He about this time the two brothers set up businesses on their own account in Birmingham, William as a 'plater' and John Gregory Hancock as a die-sinker. He was still there in 1783. He about this time the two brothers set up businesses on their own account in Birmingham, William as a 'plater' and John Gregory Hancock as a die-sinker. He was still there in 1783. He was still there in 1783. He was still there in 1783. He about this time the two brothers set up businesses on their own account in Birmingham, William as a 'plater' and John Gregory Hancock as a die-sinker. He was still there in 1783. He was still the still the still the still the still the still the sti

MEDAL of DR. PRIESTLEY.

This Day is published.

In Gold, Silver, and Bronze, taken from the Life, and executed by J. G. HANCOLK, Birmingham;

A N elegant and firiking MEDAL of Dr. PRIESTLEY. The Reverse of which represents forme of the Doctor's newly invented experimental Machinery. Sold by John Thornton, near S. Bartholomew's Chapel; Mestre. Richards, High-sheet; Piercy and Ines, Printers and Booksellers, in Dale-End; and Mr. Phipson, New-street, Birmingham, by whom Merchants. Factors, and others, may be sugalish with any Quartity on the shortest Notice.







Fig. 2. Hancock's Medal of Dr Priestley [D&H: Warwickshire 32 & 33; BHM: 251]

appear to have lived in Hospital Street until his last years: there is no obvious evidence of there being an inherited family toyman's business, a suggestion which may arise from the quite separate activities of Hancock's brother William, or to associate with Hancock the royalist medalets signed 'I H & Co' (treated in R.N.P. Hawkins, A Dictionary of Makers of British Metallic Tickets ... (London, 1989) pp. 22–23).

Robert Hancock's death was reported in Aris's Birmingham Gazette on 20 August 1792: 'Last week in his 79th, year, Mr. Robert Hancock, formerly of the Soho Manufactory, near this town'. He might be the engraver, shown in the directories as resident in Summer Hill and then Moat Row in the 1780s and 1790s. If so his continued appearance at the latter address in John Ward's 1798 New Birmingham Directory is explained by the fact that this publication was simply a reissue of his edition for 1792. The entries, however, may equally refer to Robert Hancock, the mezzotinter. For the latter, see C. Cook, The Life and Work of Robert Hancock (London, 1948 and Supplement 1955).

MBP 236/103. The original indentures, which have not been traced, were dated 24 June 1763.

<sup>11</sup> Eric Delieb, The Great Silver Manufactory: Matthew Boulton and the Birmingham Silversmiths 1760–1790 (London, 1971), pp. 57 and 126; MBP 236/105 (William Hancock to John Scale, 3 April 1781).

15 Charles Pye, A New Directory for ... Birmingham & ... Deritend (Birmingham. 1785), p. 33. William continues as a 'plater' in subsequent directories until Pye's directory for 1797 where he is described as a 'toyman'. It may be that it is Williams's later activities that have given rise to the notion of there being a family 'toy' business.

Surprisingly, in view of his later prominence as a die-engraver and medallist, the 'Priestley' medals seem to be Hancock's only authenticated numismatic productions until his involvement with the new provincial coinage of the Parys Mine Company four years later and Thomas Williams's manoeuvrings for a national coinage contract. In this latter context Hancock engraved dies for a pattern guinea and for the pattern halfpenny designed by Williams's friend, Samuel More, the Secretary of the Society of Arts. <sup>16</sup>

There are the unfinished uniface flans for the so-called trial 'halfpenny' of Samuel Garbett [Fig. 3] which Matthew Young is said to have attributed to Hancock. The portrait is, certainly, redolent of the die-sinker's style. It seems unlikely, however, that these anomalous pieces predate the Anglesey issues as some have suggested. The more credible explanation is that they were produced by Hancock as trial specimens in the 1790s and rejected by Garbett whose attitude to tokens was, to say the least, guarded. Miss Banks, for instance, did not acquire her specimen until 1798 and, bearing in mind her acquisitiveness and acquaintance with the personality depicted, it would have been surprising if she had not obtained it very much earlier had it been available. Interestingly enough its first catalogue appearance is in Conder's *Arrangement* published in the same year. <sup>17</sup>



Fig. 3. The Garbett 'Trial Halfpenny' [D&H: Warwickshire 125]

To find out more about Hancock one has to resort to the Birmingham trade directories of the time. He first appears in Pye's *Directory* for 1785, described – presumably, in the way of these things, at his own instance – as a 'Modeller, Die-sinker, and Chaser' in Bartholomew Row, Birmingham. Two years' later, now removed to 45 Edmund Street, he is shown, more simply, as an 'Artist'. This was to be his standard directory designation, though at a variety of addresses, until his final appearance in Chapman's volume for 1803, now at last resident in Hospital Street. It is as an 'artist', too, that he is described in the notice of his death in Aris's *Birmingham Gazette* for 11 November 1805:

Saturday, s'ennight [i.e. 2 November 1805], aged 55, sincerely lamented by all the friends and patrons of genius, that admired artist, Mr J G Hancock, of this town.

Five years earlier when he had essayed a private token or medal for himself it was an impression of an artist-engraver's studio that Hancock chose to portray on an unfinished proof [Fig. 4]. According to Sharp it represented an interior view of Hancock's own workshop. 'To the workboard a vice is affixed, and near it an engraver's cushion; to the right of the window, in the distance, is seen a whole-length anatomical figure, and a female torso on a pedestal, with a large cast of a head resting against it, occupies the foreground'.<sup>19</sup>

<sup>&</sup>lt;sup>16</sup> Forrer recorded a bronze uniface (obverse) pattern guinea of 'Spade type', signed 'HANCOCK', which would presumably date from c.1787 and be connected with Williams's campaign for a national coinage contract: Forrer as in n.11, VII, pp. 414–15; For the More halfpenny see C. Wilson Peck, English Copper, Tin and Bronze Coins in the British Museum 1558–1958 (London, 1960), pp. 238–9 and plate 15, 929.

<sup>&</sup>lt;sup>17</sup> Sharp, as in n. 8, p. 121. Miss Banks recorded the acquisition date of her Garbett 'halfpenny' as 26 February 1798 in her token catalogue [Sarah Sophia Banks], Ms Catalogue of Coin Collection, VI – Tokens, p. 25; BM, Department of Coins and Medals, Arc R19; James Conder, An Arrangement of Provincial Coins, Tokens, and Medalets, ... (Ipswich, 1798), p. 222.

<sup>&</sup>lt;sup>18</sup> The directories show Hancock, described as an 'artist', at Snowhill from 1791 to 1798, Summer Lane in 1800 and 1801, and Hospital Street in 1803.

Hospital Street in 1803.

19 Sharp, as in n. 8, p. 29. Miss Banks states that this piece was 'intended by <u>Hancock</u> for his private token, such as it is there are only six': [Sarah Sophia Banks], as in n. 17, 'Private Tokens'.



Fig. 4. Hancock's 'Interior View of his Workshop' [D&H: Warwickshire 14bis]

From such scraps of external contemporary evidence one must conclude that Hancock saw his public image as being that of an artist – a modeller and a die-engraver. And, going right back to the 'Priestley' medal, although this has the bold obverse legend 'I.G. HANCOCK F[ecit]' the implication of the *Gazette* advertisement is that it was Thomas Phipson (1738–1807), the New Street refiner and metal-roller, who was responsible for its actual striking.

Phipson, whatever the standard works may say, was not an engraver himself, although he had already branched out into medal *making*, cashing in on the popular euphoria that had greeted the acquittal by court martial of Admiral Keppel in 1779.<sup>20</sup> A decade on he produced Simeon Moreau's Cheltenham medal celebrating George III's recovery from illness, from dies, once more, by Hancock [*BHM*: 301]. As a prominent Unitarian Phipson may well have been the inspiration behind the Priestley medal – its sponsor as well as its manufacturer. In 1794 he made sure that the public was left in no doubt as to his responsibility for the medal struck to commemorate Priestley's departure for America [Fig. 5], but by now Hancock, who must have engraved the obverse portrait, would anyway have been rather chary of associating his name too openly with the radical philosopher.<sup>21</sup>



Fig. 5. Medal of Priestley's Departure for America [BHM: 381]

<sup>29</sup> Paul Withers, 'A Medallic Feud', The Medal, 18 (1991), 31. Phipson's 'Keppel' medal has not been identified from among the several versions produced at the time.

<sup>&</sup>lt;sup>21</sup> If Hancock's few attributed political tokens or medals truly represent his views he – and his pupils, Jorden and the younger Westwood – were 'King and Country' supporters, opposed to Priestley's radical philosophy, especially after the Birmingham riots of July 1791: cf. D&H: Warwickshire 34 (? Hancock) and Middlesex 829–830 (by Hancock and Jorden) although the trials Warwickshire 333 and Cheshire 60 are favourable.

To return to the question of Hancock's tokens and the younger Westwood's letter, Westwood had put particular emphasis on the period down to 1792 since his uncle had died in the March of that year. Pye tells us, however, that Hancock continued manufacturing tokens for another three years. These were the strikings for:

Salop Woollen Manufactory of Shrewsbury – 5 ton (1793) [Plate 44, 2; D&H: Shropshire 19–22];<sup>22</sup>

Hawkins Bird of Bristol – 1 ton (1793) [Plate 10, 4 and 5; D&H: Somerset 88–9];

Sharp and Chaldecott's Chichester version of their halfpenny – 1 ton (1794) [Plate 4, 3; D&H: Sussex 19–20];

The Thames and Severn Canal Company of Brimscombe Port – 3 ton (1795) [Plate 10, 2 and 3; D&H: Gloucestershire 58, 59–61]; and

'JB' of Foundling Fields, London (1795) – 3 cwt. (1795) [Plate 29, 6 and 7; D&H: Middlesex 303–5].

The 'JB' tokens, demonstrably inferior in quality of production to what had gone before, if elegant in the simplicity of their design, were among the last, according to Pye, that Hancock was to manufacture himself. The year 1795, therefore, marked a significant watershed for the die-sinker who was henceforward to be employed by other manufacturers to engrave dies for their commissions or speculative ventures; the metal roller Thomas Dobbs, Peter Kempson and, at the turn of the century, his old master Matthew Boulton. And as tokens ran their course his work became increasingly medallic and of remarkable quality.<sup>23</sup>

What brought about this change in Hancock's circumstances to cause him to abandon the large scale token manufacture that Pye predicates for the years 1788–95 and return to his more restricted, if artistically assured, trade-skill of die-sinking? And reverting to our original question, how does all this tie in with John Westwood, junior's letter? But first one should perhaps try to establish what is known about the Westwoods.

John Westwood, senior (1744–92), and his younger brother Obadiah (b. 1747 [NS]) were both immigrants to Birmingham from Bilston in Staffordshire.<sup>24</sup> Little, otherwise, is known about their early life but there is good reason to believe that John Westwood began his Birmingham career as a seal and copper-plate engraver and he is described as such in Sketchley's directory for 1767, resident at the Bear and Ragged Staff in Bull Street. He is credited with a number of book illustrations including the plates for John Baskerville's folio Bible of 1769–72, the frontispiece to Myles Swinney's ephemeral magazine, the *British Museum or Universal Register* [1771] [Fig. 6], and an engraving of a fractured leg in the *Medical Miscellany* for 1769.<sup>25</sup>

As a medallist, and we must be talking about the same man, he engraved the dies for commemorative pieces for John Wilkes's Middlesex election victory in 1768 [BHM 113-14], the visit of

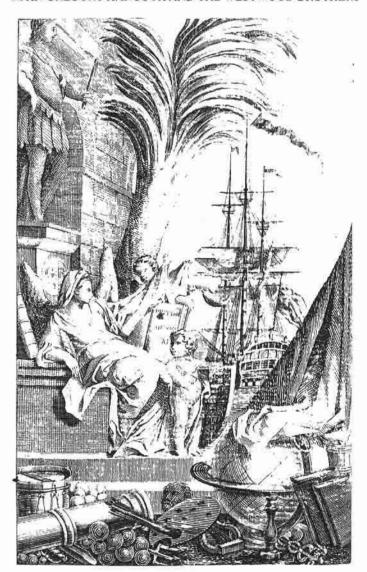
Hawkins Bird was a grocer; Thomas Chaldecott, a cutter and silversmith: and Thomas Sharp, a mercer. Miss Banks noted the issuer of the 'Foundling Fields' halfpenny as 'Burton, London': [Sarah Sophia Banks], as in n. 17, p. 78. It seems most likely that this was James Burton (1764?–1837), the developer of much of the Foundling Hospital estate in the 1790s, and that the tokens were issued in part-payment to his workmen.

<sup>25</sup> For Dobbs: D&H: Middlesex 294-5 [1795]; for Kempson Cambridgeshire 9 [1799]; Leicestershire 1–2 [1800]; Staffordshire 2 [1800] and 9 [1800]; and Warwickshire 14, 14bis. [1800], 41–2 and 44 [1801], 64, 67–8 and 69 [1797]; and for Boulton (his last venture in token engraving): D&H: King's County 1–4 [1801]. Hancock has also been suggested (in *BHM*: 497) as a possible engraver of D&H: Middlesex 239–41 [1800], which is certainly of Birmingham origin.

<sup>24</sup> John Westwood, senior, was baptised in Bilston parish church on 27 August 1744 and Obadiah on 28 Pebruary 1746 (OS): John Westwood, junior was baptised in Birmingham (St Philip's) on 31 May 1774. Forrer (as in n. 11, VI, pp. 458–9) is unreliable on the Westwoods' biographical details and confuses their venure.

<sup>25</sup> Listed under 'Engravers and Chasers': Sketchley's Birmingham, Wolverhampton & Walsall Directory ([Birmingham], 1767), p. 24; Joseph Hill, The Book Makers of Old Birmingham (Birmingham, 1907), pp. 77n., 80, 89, 118.

<sup>&</sup>lt;sup>22</sup> The Salop Woollen Manufactory appears to have been a flannel mill operated by the firm of Cook and Mason at the isle on the Severn just upstream from Shrewsbury. In 1796, according to Arthur Aikin, it was the 'greatest undertaking' in Shropshire flannel manufacture; it continued in operation until the 1820s; Arthur Aikin, *Journal of a Tour through North Wales* (London, 1797), p. 17; Barrie Trinder, *The Industrial Archaeology of Shropshire* (Newton Abbot, 1973), p. 138. I am grateful to Mr Tony Carr of the Shropshire Records and Research Service for this information.



Genius difeovering the Hiltory of the Arts & Arms of Great Britain.

Fig. 6. John Westwood's frontispiece to Swinney's British Museum or Universal Register [1771]

Christian VII of Denmark to England the same year [BHM 130], Garrick's Shakespeare Jubilee celebrations at Stratford in 1769 [BHM 136] [Fig. 7] (and a Birmingham Theatre ticket based on the same obverse die in 1774 [D&W: Dramatic Tickets 7–8]), and George Whitefield's death in 1770 [BHM 149]. It has been plausibly argued, too, that he was also responsible for the Resolution & Adventure medal of 1772 [BHM 165] and other, probably abortive, work for Boulton and Fothergill.<sup>26</sup>

bly attributed to the uncle.

<sup>26</sup> Arthur Westwood, Matthew Boulton's 'Otaheite' Medal (Birmingham, 1926), pp. 2–3; L Richard Smith, The Resolution & Adventure Medal (Sydney, 1985), pp. 8 and 12 where reference is made to Westwood's engraving for Boulton and Fothergill of projected medals 'for Mr Banks and Dr Solander' in 1772. I am indebted to Mr David Vice for drawing the latter monograph to my attention. Unfortunately BHM does not distinguish between the productions of the two John Westwoods but nothing after 1774 can be plausi-



BIRMINGHAM, August 30, 1769.

On Monday next will be published.

MEDAL of the inimitable SHAKESPEARE, struck either in Silver or Copper; done from that intended to be worn by Mr. Garcick, at the approaching Jubilee, which is an approved Likeness of that Great Man. Ladies and Gentlemen may have them, either in Cases for the Pocket, or with Pendants for the Bosom, at Mr. Westwood's, Engraver, in Newhall-Walk; or at the Toy-Shops in Birmingham; they may likewise be had at Mr. Payton's, at the White-Lion, in Stratford, and the Toy-Shops there,

\*\* Ladies and Gentlemen may have them struck in Gold, on the shortest Notice.

Fig. 7. John Westwood's 'Shakespeare's Jubilee' Medal [BHM: 136]

Westwood issued his 'Shakespeare Jubilee' medal from Newhall Walk [Fig. 7]. Already diesinking and metal-stamping may have been taking precedence over copper-plate engraving for by 1770, joined now by Obadiah at 37 New Hall Street (probably the same address), he could describe their business as that of 'Dye Sinkers and Coffin Furniture makers'. 27 Birmingham manufacture of coffin furniture – brass mountings, handles and ornaments – had been revolutionised by a die-stamping invention in 1769 and Obadiah quickly took advantage of this new development. 28 By the late seventies, now removed to Great Charles Street, the brothers' paths had begun to diverge, Obadiah to concentrate on his coffin furniture, decorative stamped metal-work and button making, and John, in association with William Welch, the copper factor and Anglesey agent, to branch out into the merchandising of copper and brass, and, in due course, to gravitate into metal rolling for the trade on a fairly large scale. 29

Both brothers were inventive characters. Obadiah, for instance, was granted a patent in 1786 for a catch-all method of 'making trays, waiters, card-pans, caddies, dressing boxes, bottle-stands, ink-stands, coat, breast and other buttons, frames for picture and other things, mouldings, and ornaments for rooms and ceilings and for other purposes' by stamping treated textile pulps. <sup>30</sup> John Westwood has been credited with the invention of a new form of cannon but this must be a garbled reference to John Wilkinson's famous patent of 1774. <sup>31</sup> Much more importantly, he was justly responsible for the patenting of a method of 'hardening and stiffening copper' by graduated cold rolling in 1783. <sup>32</sup> Westwood's association with Welch had brought him into contact with Thomas Williams, the managing partner of the Parys Mine Company, and he now became even more closely linked with Williams who adopted Westwood's rolling methods at his Holywell

Listed under 'Engravers and Chasers': Sketchley & Adams Tradesman's True Gnide: ... (Birmingham, 1770), p. 24. The
 Westwoods were also coin-weight manufacturers: Paul and Bente Withers, British Coin-Weights (Llanfyllin, 1993), p. 159 and passim.
 R.A. Church and Barbara M.D. Smith, 'Competition and Monopoly in the Coffin Furniture Industry, 1870–1915', EcHR, XIX

<sup>&</sup>lt;sup>28</sup> R.A. Church and Barbara M.D. Smith, 'Competition and Monopoly in the Coffin Furniture Industry, 1870–1915', *EcHR*, XD (1966), 621.

<sup>29</sup> Westwood, as in n. 26, p. 10; in addition to button-making Obadiah Westwood was also involved in the production of popular medals: Withers, as in n. 20, pp. 29–33.

<sup>30</sup> Patent Specification 1576, granted 14 December 1786.

Westwood, as in n. 26, p. 10; Patent Specification 1063, granted to John Wilkinson 27 January 1774.

<sup>32</sup> Patent Specification 1398, granted 15 November 1783.

manufactory. Westwood's invention, coupled, in some way, with a process for making copper bolts patented by William Collins, another associate of Williams, paved the way for the Anglesey entrepreneur to gain a virtual international monopoly of copper sheathing for ships in the last decades of the eighteenth century.<sup>33</sup>

The Williams and Collins connection led, in turn, to Westwood's becoming a key figure in the team involved in Williams's attempts to secure the contract for a regal coinage and the production of the 'Copper King's' tokens. Westwood is said to have minted the 'Monogram' Anglesey penny, engraved by Milton from designs conceived by Collins and perhaps Samuel More in 1786.<sup>34</sup> This is quite likely but Westwood's own capability of striking a large scale quality coinage at this time would have been minimal and Williams's production coinage, the dies for which were engraved by Hancock, was embarked upon not later than the new year at Holywell, where Williams had quickly installed at least one coining press alongside his rolling mills and cutting out presses.<sup>35</sup>

What was actually happening at this time is totally obfuscated by the absence of any credible archive material. We are dependent on the papers of Matthew Boulton, Williams's rival for a national coinage contract, and the rumours of the latter's machinations that constantly assailed the Birmingham entrepreneur. What we can devine amounts to little more than informed hearsay, but in all the jockeying for a national coinage contract, Hancock's name is constantly linked with that of Westwood. In March 1787 Boulton, in something of a panic, told Samuel Garbett that the Birmingham manufacturer, Richard Ford, had introduced Westwood to King George III and had shown the king some Anglesey pennies: 'Westwood and Hancox the dye Graver speak publicly of their going to reside in the Tower very soon to manage the \(\varphi\) Coinage. Hence it appears that Williams seems sure of the contract... Williams (I was told yesterday by Wilkinson) hath got several presses at work at Hollywell & is making pieces for himself and for Wilkinson'; Hancock's engraving of 'Wilkinson's head', he noted at much the same time, was 'cutting by Westwood for a Coin to be circulated', 36 Two months later Boulton was edgily telling Garbett that Williams had 'articled with Hancox and he is going to Hollywell'. He had, as he confessed to Droz, 'no Artist who is capable to engrave a head' for Williams had 'already hired the 2 best Die Engravers in England [Hancock and Westwood] in order to prevent other persons from benefit by their service'.37

While there is no absolute evidence, it seems not unreasonable to assume that Westwood, with Hancock as die-sinker, oversaw Williams's production of 'Druid' coins both at Holywell and Birmingham when, after little more than a few weeks, his coining operations were transferred to the Midlands because of its better distribution potential.<sup>38</sup> After all, Williams, although he had cut copper blanks for the Dutch East India Company, had no experience of striking coins previous to his 'Druid' venture.

It was a happy situation that was to continue for another two years. Seventeen-eighty-nine, however, not only saw revolution in France; it also witnessed a total reversal in Westwood's fortunes. In that year Williams, facing up to the reality of there being no government coinage contract in the offing but secure in his overall control of the copper market, decided to abandon the actual manufacture of coin to his arch-rival Boulton, minting machinery and all.<sup>39</sup>

<sup>&</sup>lt;sup>33</sup> Patent Specification 1388, granted 2 October 1783; J.R. Harris, 'Copper and Shipping in the Eighteenth Century', EcHR, 2nd. Series, XIX (1966), 558-63; J.R. Harris, The Copper King (Liverpool, 1964), pp. 47-50.

<sup>&</sup>lt;sup>34</sup> Thomas Stainton, 'John Milton, Medallist, 1759–1805', BNJ 53 (1984), 145; D.W. Dykes, 'The Myth of Mr Dawes's Monogram', NCirc, CVI (1998), 352 and 354, n. 3; G.E. Mercer, 'Mr More of the Adelphi, Jnl.RSA, 127 (1979), 176.

<sup>35</sup> MBP: 148/63: (Matthew Boulton to Samuel Garbett, 28 March 1787).

<sup>&</sup>lt;sup>36</sup> MBP: 148/63, as in n. 35; MBP 378/51 (Coinage Notebook 3 (1787-8), p. 14 (14 March 1787)).

<sup>&</sup>lt;sup>37</sup> MBP: 148/97 (Boulton to Garbett, 22 April 1787); MBP: 28 (Boulton to J.-P. Droz (draft), 12 June 1787).

<sup>38</sup> The transfer to Birmingham probably marked the end of the 'D' issues of 'Druid' pennies. By the beginning of May Boulton had heard a rumour that Williams was employing a coining press belonging to a person in Birmingham: it would not be fanciful to believe that this was Westwood organising the change-over; MBP; 309/59 (Draft to John Vivian enclosed in Boulton to Garbett, 4 May 1787).

<sup>&</sup>lt;sup>39</sup> For this episode and its implications for Matthew Boulton see David Vice, 'The Soho Mint & the Anglesey Tokens of the Parys Mine Company', Format 33, 3–4.

Westwood, perhaps privy to Williams's intentions, had, in the meantime, committed himself heavily to the purchase of new coining equipment. Ignoring Boulton's advice to buy Williams's presses, 'as I knew it would be injurious to Westwood to get new Presses made', he had spurned Williams's machinery – 'the worst presses he ever saw' – and, bereft of the latter's patronage, soon found himself over-stretched in his copper-rolling business and financially vulnerable just at a time when copper prices were wildly fluctuating. By September 1789 he was, financially, in a parlous state. By December he had become bankrupt and as a result a number of respectable, supportive Birmingham businessmen including John Hurd, Boulton's partner in his copper enterprises, had caught severe pecuniary colds.<sup>40</sup>

Yet, bankrupt as he was, Westwood somehow continued in business as a 'roller of metals' and, after a false start, as a coin maker on his own account. He had committed himself to the production of halfpennies for the Cheshire copper and brass manufacturers, Roe and Company, and their associate mining firm at Cronebane in County Wicklow. For a while his affairs were in total disarray and, as yet, without sufficient plant of his own, he had to subcontract his Cronebane commission to Boulton. An agreement to strike halfpennies for the Southampton naval contractors and brewers, Walter Taylor and Company, was cancelled after a small production run [Fig. 8] and appropriated by Boulton as was a tentative arrangement Westwood had made through the Birmingham merchant Thomas Venables with the Glasgow woollen drapers, Gilbert Shearer and Company. It was not to be long though before Westwood, ever the survivor, had got his act together again. Perhaps through the helpful dilatoriness of Hancock he retained the commission with Roe and Company for their first Macclesfield halfpennies - the 'Beehive' tokens - which, it was rumoured, he had to have struck in London although they may well have been made on his own now newly-installed presses in Birmingham. 41 At any rate by the Spring of 1790 Westwood had struck another tranche of halfpennies – the 'Charles Roe' halfpennies – for Roe and Company and had undertaken to coin for Wilkinson. As Boulton informed Garbett on 29 March,

The Macclesfield Co have lately ordered of Jn° Westwood an addition of 25 Tons to the 21 Ton lately issued by them (36 to the pound) & those of this last order have the Head of old Roe upon them.... Mr Jn° Wilkinson hath likewise ordered a certain number of Tons of his ½ pence with his own portrait upon them to be fabricated by Westwood.... As to Taylor's coinage of Southampton, I believe, I have for the present put a stop to it. He had positively ordered them of Westwood, the Dies were prepared, & specimens struck off but the execution being retarded by Westwoods Bankruptcy, Mr Taylor applied to me.<sup>42</sup>



Fig. 8. Westwood's Southampton Halfpenny, its pseudo-heraldic reverse reflecting the naval contracting and brewing interests of Walter Taylor and Richard Moody [D&H: Hampshire 84].<sup>43</sup>

<sup>&</sup>lt;sup>40</sup> MBP: 150 (Boulton to Thomas Williams, 24 May 1789). Westwood's bankruptcy as a 'caster of metals' was gazetted on 1 December 1789: *The Times*, 2 December 1789.

<sup>&</sup>lt;sup>41</sup> David Vice. 'The Cronebane Token of the Associated Irish Mine Company', Format, 42, 2-6. Hurd was the source of the rumour of the tokens being struck in London.

<sup>&</sup>lt;sup>42</sup> MBP: 150/132 (Boulton to Garbett, 29 March 1790).

<sup>&</sup>lt;sup>43</sup> Two dozen of these tokens were sent to Walter Taylor on 5 January 1790 when Westwood was still striving to retain the contract: Richard G. Doty, 'Matthew Boulton's Tokens for Southampton', *The 'Conder' Token Newsletter*, IJ, 1, (15 August 1997), 19.

Walter Taylor (1734–1803) was a naval contractor and blockmaker and Richard Vernon Moody (ob. 1792) was a banker. In addition to their primary interests they were co-partners in a brewery concern. I am grateful to Mr A.J. George of Southampton Archives Services for this information. For Taylor see J.P.M. Pannell, *Old Southampton Shores* (Newton Abbot, 1967), pp. 51–72.

#### STWOOD BROTHERS

Within two years John Westwood was dead<sup>44</sup> and, even if he had done little to clear his debts, he had established his coining business to the extent that it could be taken over by his brother Obadiah as a going concern. This is made explicit by another source. In the spring of 1793, Thomas Digges, an American government-confidant with English business interests, reported to Thomas Jefferson, the United States Secretary of State, a scheme he had uncovered to procure a contract for the coining of American cents in Birmingham. Though his informants were 'close & secret as to who the die sinker was, where coined &ca', he discovered that these coins – the 'Washington/Eagle cents' [Fig. 9] – had been manufactured, through the agency of William and Alexander Walker, Birmingham merchants with American trading interests, 'at Mr Obediah [sic] Westwoods (a considerable maker of these kinds of money, and that his die sinker Mr Jno Gregory Hancock (one of the first in this place 'tho with the Character of a dissipated man) and a prentice Lad Jno Jordan, very Clever in that line, had executed them & still hold the dies'. 45









Fig. 9. Obadiah Westwood's Pattern Cents [D&H: Middlesex 1049–50] '... the President's head, not a bad likeness, & tolerably well executed'. 46

Digge's exposure of the activities that Obadiah, and presumably his brother before him, were engaged in and his reference to 'these kinds of money' – copper currency and its token substitutes – tends to bear out, at least in general the burden of the younger Westwood's letter to Matthew Robinson Boulton with which we began this address. Evidently the brothers operated on a comparatively large scale but, if so, and here one returns to our original conundrum, why is there only the most exiguous mention of either Westwood in Pye's catalogue and why are all the tokens that one would assume to have been struck by them attributed to Hancock whom Digges refers to as Obadiah's die-sinker? Even the diligent William Robert Hay briskly sniffing out the coineries of Birmingham and grangerising his catalogues with the information he unearthed makes no mention of the Westwoods' apparently substantial business.<sup>47</sup>

The explanation must lie in John Westwood's bankruptcy and, perhaps, too, in the dubious nature of his character and that of his brother; a factor of some significance in a town where business might be sharp but was dominated by some degree of rectitude at its higher levels which were all too conscious of 'Brummagem's' reputation in matters of coining.<sup>48</sup> To Boulton,

<sup>&</sup>lt;sup>44</sup> John Westwood's death was reported in Aris's Birmingham Gazette on 12 March 1792: 'On Friday night [9 March], Mr. John Westwood, a very ingenious mechanic of this town'.

<sup>&</sup>lt;sup>45</sup> Thomas A[ttwood] Digges to Thomas Jefferson, 10 March 1793: Thomas Jefferson Papers. Library of Congress. 1 am grateful to Mr James H. Hutson, Chief of the Manuscripts Division, Library of Congress for copies of this letter and that referred to in n. 46.

See also Don Taxay, The U.S. Mint and Coinage (New York, 1966), p. 53; and R.W. Julian, 'The Digges Letters', SCMB, No. 533 (October 1962), 385

<sup>&</sup>lt;sup>46</sup> Digges to Thomas Pinckney [the American Minister in London], 6 April 1793; Thomas Jefferson Papers, as in n. 45.

<sup>&</sup>lt;sup>47</sup> Hay was in Birmingham in September 1796, admittedly after the Westwoods' large-scale coining operations had ended, but he had discussions with a number of people intimately connected with the token-making scene including John Stubbs Jorden: Dykes, as in p. 5.

n. 5.
 48 For 'Brummagems' (used for false coppers since at least 1682 [Oxford English Dictionary]) see Francis Pierrepont Barnard, 'Forgery of English Copper Money in the Eighteenth Century'. NC, 5th. Series, VI. 351–352.

Westwood was 'an ingenious Shabby Fellow, associated with Counterfeiters of Coin & Engraved Glasgow Bank Notes'; someone whom, he told Wilkinson, he was not prepared to compete with, someone, he confided to his notebook, who was 'not fit to run a mint'. <sup>49</sup> It is not surprising that Westwood's bankruptcy and fall from grace should be perceived as a just desert to a career of questionable integrity. There is more than a little inwardness in Pye's almost apologetic reference to him in his *Description of Modern Birmingham* where he 'considers it no more than an act of justice, to observe, that the manufacture of copper bolts, for fastening the timbers of ships together was invented by Mr John Westwood, an inhabitant of this town'. <sup>50</sup> That there was no reference to the latter's major concern in copper rolling or to his coining activities, may well have reflected his townsmen's understandable wish to forget Westwood.

Our riddle begins to resolve itself through another *Gazette* notice which Obadiah Westwood placed in the newspaper on 19 March 1792 [Fig. 10].

Birmingham, March 14, 1794.

WESTWOOD cannot omit this Opportunity of returning Thanks to the Encouragers and
Customers of his late Brother, John Westwood, nor
delay foliciting them in bis own Behalf for their future
Favours, as he intends to continue the Rolling of Metals
in all its various Branches as usual:

That Part of the Business wherein J. G. Hancock had a Concern with John Westwood, such as Coining of Midals, &c. &c. will be carried on with its usual Spirit,——At the same Time, O. Westwood wishes to inform the Creditors to the Estate of John Westwood, deceased, that their recent Demands shall be immediately liquidated by him.

N.B. O. Westwood also gives this Notice to Merchants, Factors, and the Public in general, that he still continues carrying on at his own Manufactory his sormer Trades of Cossin Furniture Making, the new invented Picture Frames and Glosses, Borders for Rooms, &c. as also all Sorts of stamped Comodes and Brass Works.

Fig. 10

John Westwood, senior, had died ten days earlier but by the time of his death his debts had not been discharged – indeed, despite Obadiah's expressed intentions they were not to be settled for another year and then only on the basis of the payment of a very small dividend to his creditors. For Obadiah the advertisement was a 'damage-limitation exercise' calculated to retain the confidence of his brother's remaining customers and the faith of his creditors. For modern numismatists its importance lies in its reference to what was clearly an established and ongoing business partnership between John Westwood and John Gregory Hancock. What the nature of this partnership or 'concern' was will probably never be known. The most likely explanation is that it was an arrangement of convenience arising out of Westwood's failure, which provided the cover for him to continue his coining activities. To the contemporary observer Hancock was thus seen as fronting the enterprise to the extent that Pye could record the die-sinker as the principal of the firm

<sup>&</sup>lt;sup>49</sup> MBP: 378/51, as in n. 36, p. 17 (26 March 1787): Boulton's words about Westwood's fitness to run a mint were in the context of the latter's expectations of Thomas Williams winning a national coinage contract: neither 'were capable of conducting such a Manufacture as the Mint ought to be': MBP: 367/40 (Boulton to John Wilkinson (draft)), October 1790).

<sup>50</sup> Charles Pye, A Description of Modern Birmingham (Birmingham, 1823), p. 4.

<sup>&</sup>lt;sup>51</sup> For Westwood's coming debts in regard to Roe and Company see Vice, as in n. 41; Westwood's insolvency did not merely relate to his coining debts but the detailed nature of his crisis of liquidity is not now apparent

for the benefit of posterity while John Westwood and then his brother were the *de facto* manufacturers. The answer to our conundrum must be therefore that both Pye and the younger Westwood were telling the truth.

The obstacles that Digges had had to overcome in tracking down Obadiah Westwood's coinery arose, in some measure, from the Walkers' suspicion of his being an American government agent. Set But the whole Westwood coining operation was, in itself, a suspect one that did not bear too close an examination; Obadiah was little better than his brother and Hancock himself was evidently not above reproach. Although much more research has to be done on the subject it is plain that, from the beginning, the counterfeits (or at any rate a high proportion of the more plausible ones) and the 'muled' pieces that dogged the consortium's large output of commercial tokens were actually struck in house; the Westwoods were, in fact, bypassing the legitimate 'proprietors' who had commissioned them and forging the latter's issues for their own direct profit. It is hardly surprising that the younger Westwood, brought up in such a counterfeiters' kitchen, should have devoted so much time to the specious fabrications that he foisted on a gullible public as token collecting took on the proportions of a mania; with his background such work was second nature to him.

Within two years of his visit, however, the Westwood enterprise that Digges had come upon had been wound up. By 1795 large-scale token production had already become a thing of the past. Now the call was for comparatively low-volume issues to meet the demand of local shopkeepers, and new, thrusting, manufacturers like Kempson and Lutwyche were better placed to meet and to foster this market. When Hay visited Birmingham in the September of 1796 he found that 'Hancock had given up the Business as had Jourdan [sic] who had gone into a Manufactory for patent Window Frames'. 55

By the time that Pye had put out the plates for the second edition of his catalogue the Westwood's coin-making business had been defunct for a lustrum and more, Obadiah was concentrating on the manufacture of his coffin furniture and picture frames, and John Westwood, junior had departed for Sheffield to pursue his craft there as an engraver and medallist.<sup>56</sup> Only Hancock was still left as a ready witness of the Westwoods' activities and, no doubt, in contributing to Pye's publication, he would not have wished to underplay his own part in their token venture. And, captive to the evidence made available to him, Pye would have accepted the partial story that he was told which subsequent generations, not unnaturally, have accepted.

In the decade remaining to him Hancock's reputation as a die-engraver was enhanced to a considerable degree by the medallic work he executed for Kempson but that was all over by 1803.<sup>57</sup> One suspects that his health had been questionable for some time. Digges thought him 'dissipated' as early as 1793. More cryptically, Sharp judged him 'unfortunate and neglected', someone whose 'talents and genius' had been unfulfilled when he died, a broken man, in Birmingham in November 1805.<sup>58</sup>

<sup>52</sup> The Walkers were well aware that Jefferson would have vetoed their scheme: cf. Taxay, as in n. 45.

<sup>53</sup> Hancock was involved, for instance, in the counterfeiting of *assignats*. On one occasion an employee of the Birmingham Assay Office was asked to cast some plates prior to repair by him. The incident was reported to Garbett who informed Lord Hawkesbury: MBP: 309/148<sup>1</sup>/<sub>2</sub> (Garbett to Boulton, 9 December 1794).

<sup>34</sup> A practice by no means restricted to the Westwoods but indulged in by other coiners, especially Lutwyche and even the more respectable Kempson.

<sup>55</sup> Dykes, as in n. 47.

<sup>56</sup> Obadiah Westwood continued in business in Birmingham until c.1811 (his last directory appearance), moving to Camphill c.1800. I have been unable to find any record of his death. John Westwood, junior moved to Sheffield c.1800, was later in Lichfield and then London where he died in 1850 (DNB 'John Obadiah Westwood'). He seems to have moved back to Harborne in Birmingham for a period c.1815 ([Wrightson's], New Triennial Directory (Birmingham. 1815)).

<sup>57</sup> With the exception of the posthumously-reworked obverse of BHM 613 no medals listed in BHM subsequent to BHM 550 [1803] can be attributed to Hancock.

<sup>58</sup> Sharp, as n. 8, p. v. Hancock's son, John Gregory Hancock, junior (bap. 6 January 1792), an infant prodigy credited with the engraving of several private tokens at the age of eight or nine, presumably died young. In 1834 Sharp failed to trace him although George Barker, a supposed sponsor of young Hancock's work, was still very much alive. The John Gregory Hancock who took out a patent for an 'elastic rod for umbrellas' (*Patent Specification* 5440) in 1826 was a cousin, William's son.

## THE SINGLE CURRENCY IN HISTORICAL PERSPECTIVE

## THE HOWARD LINECAR MEMORIAL LECTURE 1999

#### **GLYN DAVIES**

## Introduction: Our Continuing Debt to Howard Linecar

To be asked to give this lecture to pay tribute to the outstanding life-work of Howard Linecar is a considerable honour and privilege. My initial reluctance to accept, in view of my very limited knowledge of numismatics, was overcome when ultimately convinced that an outsider's observations would be appropriate for such an occasion. Numismatics has owed much to the contagious and enduring enthusiasm devoted to its cause by Howard Linecar for around half a century. I regret I cannot claim to have known him personally, unlike many in this audience who have been fortunate enough to enjoy that stimulating experience. His contribution to the wider dissemination of our knowledge of coinage puts all of us deeply in his debt. I have long been conscious that the painstaking contribution of numismatists, whether working as did Howard Linecar for a dealer and publisher like Spink - the oldest existing firm of its kind in the world, dating back at least to 1666 – or working in our museums, has been in general vastly under-appreciated by economists and economic historians. Consequently in paying this particular tribute to Howard Linecar I am glad also to be able to acknowledge and underline the overdue debt owed by the economics profession to numismatists as a whole. Their indispensable spadework has for too long been ignored by many of those who reap the fruits of their labour. Howard Linecar's generosity in endowing this biennial series of lectures beneficently extends his life-long interest in numismatics: a thing of beauty is a joy forever.

## The Euro: an Elephant on our Doorstep

Controversy constantly enlivens the dismal science of political economy, often shedding more heat than light, and has become fashionable among historians as the past is re-interpreted by each new generation. Even the Linecar Lectures have disclosed disagreements, for example with regard to the extent of coinage recycling in the early years of the English penny and, later, of the extent to which peasants used money. However, it would be hardly possible to choose a subject more likely to stir up controversy, probably more so in Britain than anywhere else in the EU, than the subject of the euro, its antecedents and its pretended eventual inevitability. This question of the

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<sup>1</sup> In the first Howard Linear Lecture, 'English Numismatics – Progress and Prospects', Ian Stewart writes 'to put it bluntly, much of the interpretation placed on the late Anglo-Saxon monetary system in recent years seems to be misconceived' and he doubted whether there was 'a full recoinage after each change of type' in Eadgar's reign. BNJ 58 (1988), 119.

In the fifth Howard Linecar Lecture, 'Peasants and Coins: the Uses of Money in the Middle Ages', Christopher Dyer convincingly contests the view that 'peasants are often seen as living within a natural, self-sufficient economy, in which money played a small part' and shows that 'late medieval peasants owned and used coins, were embedded in a market economy and were money conscious. The belief that they were insulated from money fluctuations by their self sufficiency can no longer be advanced with assurance'. BNJ 67 (1997), 30 and 46.

union of currencies splits governments, splinters oppositions, both among the 'ins' and the 'outs',<sup>2</sup> and sharply divides members of most political parties and of none. Needless to say, the economists in the United Kingdom are deeply divided, with the pessimistic Eurosceptics probably in the majority. Admittedly, money throughout history, because of its intrinsic nature, has rarely, if ever, been neutral in its effects on society.<sup>3</sup> It has always led to disputes and arguments; yet the promise or threat of the euro has raised the stakes to an unprecedented degree. Obviously the question of the single currency is a matter of transcending importance, the natural culmination of the Treaty of Rome, 1957, and potentially, if it endures, easily the most important monetary event of the twentieth century for Europe, and possibly even of the 1,600 years since the Fall of Rome in 410 AD when the world's longest-lasting single currency system, already riven by hyper-inflation, was shaken to its foundations. Perhaps a favourable omen for the euro was the unearthing by Transco in 1994 of the Bridgend Hoard, just about ten miles from the Royal Mint at Llantrisant, comprising some 1,400 coins minted during the reign of Diocletian from uniform dies scattered widely throughout Europe and the Mediterranean.

Although coins form only a small and long diminishing proportion of modern money -only around one-tenth of 'cash' and 1/300th part of the broad money supply, M4<sup>4</sup> - yet it is still their durable, familiar, everyday attraction that will shortly bring brightly home to the man and woman in the street and in the shop the full realisation of the historic significance of the new Single Currency, born wholesale on I January 1999, but which will appear in concrete retail form only from 1 January 2002. The process of simultaneously terminating the use of the cash currencies used by every one of the 290 million people of the eleven members of 'Euroland' will require the issue of around twelve billion banknotes and fifty billion coins in the space of six months, a changeover unprecedented in scope and nature. Despite all the revolutionary technical changes in the field of finance in recent years it remains the fact that cash in the form of notes and coin is the only form of money used by every one of all ages and incomes, requiring no prior authorisation by the user and, being anonymous, leaves no trace when being passed from hand to hand, 6 reminding us that for most of the past 2,500 years coins have been by far the most important kind of money. Though their relative importance has been generally declining for 300 years, the absolute number of coins today is much higher than ever before. According to the Payments Market Briefing, APACS, July 1999: 'cash remains responsible for over three-quarters of payments made in the UK by individuals in 1998, amounting to 25.3 billion cash payments. The enduring trend has been for the proportion of all payments made by cash to fall by about 1% pa.' In the case of the euro a gap of three years separates the introduction of the various forms of wholesale abstract bank moneys and plastic from the more concrete, retail, traditional forms of notes and coins. (This incidentally offers an enormous marketing opportunity for the sellers of plastic money). The above pattern reflects, on a much more rapid time-scale, the emergence of the earliest use of banking and then later of coinage. The Babylonians were the world's first bankers, a development which preceded the rise of Lyddite and Greek coinage along the shores of modern Turkey (a disappointed EU aspirant) by some 2000 years. The death of the drachma, the world's oldest existing monetary unit, currently being eagerly sought by the Greek government, may have to wait a few more years. What a magnificent market, comprising the rapid production of fifty billion new

<sup>&</sup>lt;sup>2</sup> The 'ins', that is those countries that joined the Euro system from its commencement on 1 January 1999, are: Austria, Belgium, Finland, France, Germany. Ireland, Italy, Luxembourg, Netherlands, Portugal and Spain. The 'outs', that is those members of the EC that did not so join are: Denmark, Greece, Sweden and the UK.

<sup>&</sup>lt;sup>3</sup> Monetary changes of any substantial weight could only be neutral if everyone had the same amounts, incomes, wealth, debts, expectations, etc as everyone else: an impossibility. C.P. Kindleberger quotes Schumpeter as 'doubting that money can *ever* be "neutral" in any meaningful sense. A Financial History of Western Europe (London, 1994), p. 4.

<sup>&</sup>lt;sup>4</sup> For a fuller treatment see my brief essay on "The Rise and Fall of the Coinage Empire" in Payments, Past, Present and Future (APACS, London, 1995).

<sup>5</sup> In comparison, the UK's decimalisation in 1971 was a non-event. Thus A.D. Garrett, in the third Howard Linear Lecture: 'The Royal Mint: a pursuit of Technical and Artistic Excellence' shows that 'the potential effect [of entry] is huge ... previous conversions of currency, our own decimalisation for example, are small by comparison'. BNJ 62 (1992), 192.

<sup>&</sup>quot; New developments in digital cash and anonymous electronic money" may in future erode this advantage – but not for the masses of the world's poor.

coins, just for starters, with the corresponding disappearance of a similar number, is being placed before mints and numismatists at the birth of this new Millennium!<sup>7</sup>

What light, if any, does past experience of single currencies, or their approximations, shed on the possible future progress of the euro? This subject, as vast as it is controversial, can only be traced here in the barest outline, so that sins of omission are bound to complement those of commission. Moreover, as a recent report of the Bank for International Settlements reminds us, 'all economic projections and judgements should be approached with a proper sense of humility'. Because the presence of the euro poses a special and distinctive challenge to the UK I shall concentrate on Britain's experience with single or common currencies, an approach which is justified for a number of reasons. To begin with, England was one of the first post-Roman European countries to establish and maintain a nation-wide currency. Secondly the pound sterling has never yet had to be replaced by a 'new' currency, in contrast to most of the other European countries. Thirdly the pound, taking the very long-term into account, has been a much more stable currency than that of its neighbours (though that record has been badly tarnished by its inflationary experience in the last three decades). Fourthly sterling for much of the nineteenth century and for the early part of the twentieth was by far the most widely sought-after currency in world history. Fifthly, we still do less trade within Europe proportionately than other EU members. (This difference is now diminishing to marginal proportions. The most recent statistics show that the UK's exports to the EU came to 57.3 per cent of our total in 1998, exceeding our exports to the USA by over four times). Thus to view the euro from the standpoint of our off-shore island is not to indulge in ostrich-like insularity but rather to take into account the fact that Britain's financial history was bound to make her acceptance of the single currency a more difficult choice than for any of the other fourteen members of the EU. The fear that we have more to lose is at least understandable.

## Preferred, Shared, Common and Single Currencies

There are many forces pushing and pulling currencies into prominent use beyond their own regional or national frontiers. Three of the most powerful of these have been, first, the attractiveness or intrinsic quality of a currency which makes it stand out above its rivals; second, the push given by political and military factors; and, third, commercial pressures in inter-regional or international trade. Not only does trade lead the flag but on occasion the lead roles are reversed, but, whether for war or for peaceful trade, the vitally necessary currency may come to play a significant part beyond its original homeland. The geographical extent and the duration of such monetary expansions tended to be increased when these forces continued to complement each other and were correspondingly reduced or negated when for example merchants failed to receive support from their governments, or when formerly favoured currencies became debased or suffered from shortages of supply. (It was the shortage of English money which caused the American colonists to turn to a variety of other currencies - including wampum, tobacco and paper - while demand for tax payment in sterling was a strong contributory cause of the revolution of 1776).9 In much the same way agreements among governments to share currencies have typically been disrupted by traders, dealers and speculators whenever their economic interests so dictated. Thus bimetallist agreements in the second half of the nineteenth century and the gold standard and Bretton Woods systems in the twentieth century are just a few examples where economic realities overcame political rhetoric, with even gold in serious danger of becoming virtually demonetised after Gordon Brown's surprising announcement in May 1999 that around half of the Bank of England's gold reserve was to be sold - until gold's price and prestige were rescued by the five-year moratorium on gold sales hastily agreed on 26 September 1999 by fifteen EU central banks following strong pressure from South Africa, the World Gold Council and conservative opinion world-wide. 10

<sup>7</sup> Some Eurosceptics, even among the 'ins', have wondered whether the existing coinages should be stored rather than recycled.

<sup>8</sup> B.I.S. 68th Annual Report (Basle, 1998), p. 162.

<sup>&</sup>lt;sup>9</sup> Dr D.M. Clark, in her study of *The Rise of the British Treasury* (New Haven, 1960), pp. 123 and 197, shows that a shortage of currency 'combined with the necessity of paying the new duties in sterling aggravated the problem' so 'the Treasury bore the main responsibility for measures inciting to revolution'

<sup>&</sup>lt;sup>10</sup> For contrasting views on the folly or wisdom of retaining gold as a significant part of central bank reserves, see A. Kaletsky, *The Times*, 13 July 1999, and the article 'Gold Comfort' in *The Economist*, 2 October 1999, 113–16.

Where preferred external currencies are officially condoned, encouraged, adopted or shared to such an extent that they readily cross national boundaries we arrive de facto or de jure at a common currency. Where a preferred currency grows to such an extent as to displace the existing indigenous currency completely then we arrive at a single currency, the euro being the extreme example of its type. The victory of the euro is not the result of a natural commercial process, the culmination of growing commercial pressure (though these have followed, excused and strengthened the political lead) but rather has been clearly and indisputably the result of sustained political pressure for 'ever closer union' in Europe.

The long list of preferred currencies stretches from ancient Greece to the present day and includes the Athenian owls, the Persian archers, the Roman solidus, the bezant, the florin, the écu, pieces of eight, the sovereign, the Maria Theresa thaler and its mighty namesake, the US dollar, now easily the world's most desired currency, though no longer simply in the thaler's original metallic form. Salient features from England's monetary history may be taken to illustrate the forces determining the progress from a regional to a national and eventually an international currency.

## The Expansion of the Penny and the Pound

The continuous history of the penny begins with the coins of Offa, King of Mercia, of which the earliest had been struck by c.765. During the following two centuries, a result of regional conquests and of the superior attractiveness of the penny when compared with the motley variety of sceats and stycas, Eadgar (959–975) was able to unify both the country and its coinage with a single currency re-minted in whole or part every few years. Subsequently trade with and tribute to the Danish invaders brought about a very considerable increase in mint output of pennies and in their use abroad, from Ireland to Scandinavia, particularly under Canute (1016–1035), though this first EFTA-like cooperative venture broke up soon after his death. Political and commercial causes worked strongly together to produce this short-lived but interesting early example of a shared currency. It took many centuries, however, before the penny and the pound became fully accepted all over the British Isles, for despite the very strong commercial connections the necessary political consensus proved elusive.

Without shared sovereignty even numerous, close daily trading contacts were generally insufficient of themselves to secure durable common currencies. Thus, for instance, the agreement in 1469 between Edward IV and Charles the Bold of Brabant to provide similar coinage soon disintegrated. It took many centuries after the initial attempts in 1512 before the occasionally shared large-value coins of the nebulous Holy Roman Empire finally coalesced into the single monetary system of the new German Empire of 1871, forcefully united by the Prussian policy of blood and iron. Single currencies evolved painfully slowly and hesitantly.

After the union of the crowns by James I in 1603 attempts were made to align Scottish coinage with that of England. In 1604 the Tower Mint issued a new £1 coin called the 'Unite', worth £12 Scots. 'This was a monetary conformity not monetary union': union took over a century to complete for in practice 'there was no fundamental change in the use by the Scots of foreign currency ... the evidence of hoards buried in the sixteenth and seventeenth century in Scotland points to a majority of foreign coins in circulation both in number and also by value ... in rural areas the pound Scots (at the 12:1 ratio) continued long into the eighteenth century'. Shortages of coin also occurred in England, for example in the 1790s Spanish coins were punchmarked with the head of George III for re-issue. Unfortunately they traded at a discount from their official value of

<sup>&</sup>lt;sup>11</sup> D.S. Chick, 'Towards a chronology for Offa's coinage: an interim study', The Yorkshire Numismatist 3 (1997), 47-64.

When the armoured cars of the Royal Dragoons rolled north into Denmark in May 1945 the grateful citizens of Viborg presented each soldier with a replica of Canute's silver penny – an apt reminder of northern Europe's first single currency. English-type pennies formed of course only part of a shared mixture of other currencies in Scandinavia, including coins from France, Germany and beyond, the result not merely of tribute and plunder but also of widespread trade. See G. Davies, A History of Money from Ancient Times to the Present Day, revised edition (Cardiff, 1996), pp. 130–3. Perhaps I should add that EFTA never envisaged monetary union.

<sup>13</sup> R. Saville, Bank of Scotland, a History, 1695-1995 (Edinburgh, 1996), p. 836.

five shillings, hence the public criticism: 'Two heads and not worth a Crown', and, 'Being short of silver to make money pass, they stamped the head of a fool on the neck of an ass'. Yet by the time of the Act of Union, 1707, 'both sides of the border were well down the road of a paper currency', 14 but Scotland very much more so than England. Adam Smith had pointed out in the mid-1770s that 'the circulation of paper in the room of gold and silver replaces a very expensive instrument of commerce with one very much less costly' and estimated that of what we today would call 'narrow' money three-quarters was paper<sup>15</sup> whereas even more than a century later three-quarters of narrow money in England was made up of coin, mostly of gold and silver.<sup>16</sup> When the 1825 crisis led to the failure of twenty-six banks in England and Wales the government attempted to extend its prohibition of the issue of bank notes of less than £5, enacted for England, to Scotland and Ireland also, even though no comparable failures had occurred there. The strong case made by the Scottish bankers saved the small note issues for both Scotland and Ireland. Space does not permit much reference to Ireland except to note its aversion to being used for monetary experiments such as Henry VIII's first debasement, and the attempt to foist on the Irish 'Wood's Ha'pence', which called forth general condemnation typified in Swift's 'Drapier's Letters' (1724-5), just as the threat to small note issues brought Walter Scott's powerful influence into action in 1826 under the pen-name 'Malachi Malagrowther'. His portrait has, since the bank's tercentenary in 1995, adorned, aptly enough, Bank of Scotland notes for £5, these now being much smaller in real terms than the £1 notes of 1826. Ireland, of course, has been among Euroland's most enthusiastic members, receiving record per capita subsidisation and displaying in return a remarkable take-off into sustained growth. 17

## Sovereignty and Sterling

The Irish choice of the euro and its rejection of sterling is but the most recent example among a long list of countries that have broken their previously close links with sterling. The earliest to do so (apart of course from the USA) was Canada, initially in 1851 with regard to decimalising its currency (120 years before the UK) but also having to demonstrate its different financial priorities on many occasions subsequently, most notably when refusing to become a member of the sterling area in 1932, though still participating in the system of Commonwealth Preferences which were first drawn up in Ottawa in that same year. The fundamental reason for Canada's exceptional position was the obvious and inescapable fact that she too had an elephant on her doorstep. Over a long period [Britain] had attempted to secure the adoption of the pounds, shillings and pence system in the colonies. Commercial and financial connections with the US were too close, however, to permit [the continued] implementation of this policy'. The decimal coins for Canada were produced by Heatons of Birmingham or at the Royal Mint in London until it established a branch in Ottawa in 1908: very belated compared with Australia's first branch in 1853. Despite her big neighbour, British influence over Canadian banking meant that it followed the branch banking system, which proved much stronger than the USA's unit banking system.

Canada was the exception. For the rest of the Empire the declared policy was that 'only one description of currency should be established throughout our Colonial Empire'. <sup>20</sup> This ambition

<sup>&</sup>lt;sup>14</sup> Saville, as in n. 13, p. 72.

<sup>15</sup> A. Smith, Wealth of Nations (1776), Book 2, p. 262.

<sup>&</sup>lt;sup>16</sup> G.P. Dyer, in his examination of 'Gold and the Goschen Pound Note', describes how the share of coins in the UK's total of 'notes and coin' actually rose appreciably from 48.3 per cent in 1845 to 76.7 per cent in 1913. *BNJ* 65 (1995), 190.

<sup>&</sup>lt;sup>17</sup> 'The Irish economy continued to record very rapid growth estimated at  $\$_4^4\%$  in 1998' says the Central Bank's annual report for that year and, after showing that 'economic performance over the past five years has been exceptional', goes on to warn that 'this should be regarded as something of a catch-up', pp. 7–8. A highly respected neutral observer praises Ireland as being the EU's 'leading country in terms of economic growth' with 'industrial output up by over 15% in 1997 and 1998'. *Deutsche Bundesbank*, Monthly Report, August 1999, p. 9.

<sup>18</sup> See P.W. Bell, The Sterling Area in the Postwar World (Oxford, 1956).

<sup>&</sup>lt;sup>19</sup> Ever since the mid seventeenth century Canada had been using the £sd system, but shortage of sterling coins forced Canadians to use other coins, reinforcing her decision to use dollar and cents from 1851. W.T. Easterbrook and H.C.J. Aitken, *Canadian Economic History* (Toronto, 1956), p. 459.

<sup>&</sup>lt;sup>20</sup> C.E. Trevelyan, Assistant Secretary to the Treasury, 12 December 1844 (Royal Mint Library).

was most fully accomplished in those places where formal Currency Boards were established -West Africa, Central Africa, East Africa, the West Indies and Singapore and Malaya - but approximations to this system were applied to a large number of other places ranging from Iceland to Hong Kong. As early as 1825 an Order in Council stated that 'both on grounds of policy and expediency ... it was desirable to introduce silver coins into the circulation of the Colonies'. Henceforth, according to Lord Chalmers' History of Currency in the British Colonies, 'the shilling was to circulate wherever the British drum was heard'. 21 It must have been deafening in West Africa around the turn of the century. The annual amount of silver issued for West Africa alone rose from an average of £24,426 in the five years to 1890 to reach £847,850 by 1911, thus exceeding the amount issued in the UK. All the same in local markets in both East and West Africa it may be surprising to realise that so-called 'primitive' cowrie currency was still being used after many centuries up to and including the 1950s.<sup>22</sup> Marion Johnson asserts, in a comprehensive study of 'The Cowrie Currencies of West Africa', that the humble cowrie is 'in no sense a "primitive" money, but a sophisticated form of currency capable of adaption to the particular needs of West African trade ... by 1850 the Gold Coast was importing cowries at the rate of some 150 tons a year' mostly from the Maldives, with ships bringing these shells as ballast to Britain before reexporting them to Africa.<sup>23</sup> In rural areas large bags of cowries were used for high-value and wholesale trade, while six or so individual shells were useful for the tiniest transactions of the local fairs. Thus sterling gold and silver coins never quite became the exclusive single currency even in the longest and most strictly controlled Currency Board areas, those which were the last to achieve political independence. In this regard it is of interest to note that Ghana chose the 'cedi' (the Ashanti word for cowrie) as its unit of currency after gaining independence. Thus not until our life-time did the world's oldest, gap-filling, supplementary common currency cease practically to exist.

It was not the minor drawbacks of the coinage but rather the threat to the huge sterling balances which the overseas sterling area had built up in London, especially during the period of the second world war and its aftermath, that painfully exposed the ultimate unfairness and vulnerability of a system of shared currency that, together with its gold standard precursor, had served a large portion of the world well for a century or more. Had these sterling balances maintained their value the system might still have endured, but the devaluation of 1949 and even more so that of 1967 dealt the system a heavy blow from which it never fully recovered. Criticism of the sterling system came from poor and from rich countries. Thus Professor W.A. Lewis wrote in the Financial Times, 18 January 1952: 'Britain talks of colonial development but on the contrary it is African and Malayan peasants who are putting capital into Britain'. James Callaghan felt duty bound to resign after the 1967 devaluation, according to his autobiography, because he had given his word a year previously to the Kuwaiti ambassador, when questioned about sterling's strength, that the pound would not be devalued. 'On the strength of my reply, Kuwait had maintained very substantial sterling balances which would in future be worth much less'. Criticism of sterling's weakness came also from the European Commission. 'Couve de Murville, the French Foreign Minister. seized on this as an additional reason for obstructing Britain's entry'. 24 Such concern regarding the sustainability of the exchange rate of potential entrants was a forerunner of one of the six Maastricht convergence criteria. Before looking at these and their relevance to Britain's present position a glance must be made at the extremely ambitious attempts, mostly pressed by France, to secure some form of single currency from about 1865 to 1914.

<sup>&</sup>lt;sup>21</sup> R. Chalmers, A History of Currency in the British Colonies (London, 1893), p. 40.

<sup>&</sup>lt;sup>23</sup> Professor G.O. Nwankwo, a former student of mine, described to me how cowries were in common everyday use in Ibo fairs in his boyhood. Later as a Director of the Bank of Nigeria he represented his country abroad at OPEC conferences – from cowries to petrocurrencies in a generation ... and we balk at the euro!

<sup>22</sup> M. Johnson, in 'Metals and Monies in an Emerging Global Economy', edited by D.O. Flynn and A. Giraldez, Variorum (1997), 193–248.

<sup>&</sup>lt;sup>24</sup> James Callaghan, Time and Chance (London, 1987), pp. 222 and 216.

## Britain and International Monetary Union in the Nineteenth Century

'In nothing is the English nation so conservative as in matters of currency' asserts Milton Friedman when referring to Britain's ability to shake herself free from entanglement with the bimetallist movements in France and the USA in the second half of the nineteenth century.<sup>25</sup> If the confident optimists who made themselves prominent in the plethora of monetary conferences held in that period had managed to achieve greater credibility the world might well have adopted a universal monetary union based on a uniform gold coin representing 25 francs, 5 dollars and 1 sovereign. If Britain had raised the gold content of the sovereign by about one per cent, if the USA had made a similar adjustment in the opposite direction and if France had raised its seigniorage charge slightly to one per cent, then, said the optimists, the whole of the civilised world would have followed this lead and the ideal of a universal single money system would have resulted.

The harsh reality of wars and the disruptive effect of imbalances in relative supplies of gold and silver prevented these idealistic dreams from becoming reality, as the world split into a limping bimetallist system led by France and the continuation of Britain's conservative gold standard, which other countries like Germany in 1871 and the USA in 1900 decided to join as being the better bet. All the same two European monetary unions did emerge, one large Latin Monetary Union from 1865 and the much smaller Scandinavian model from 1872. One of the main aims of France in arranging the formation of the Latin Union was 'to secure a monetary hegemony over other states by inducing them to adopt her system, and thus to obtain an influence over them which might be transmuted ... into a political leadership'.26 This was but a continuation by Napoleon III of that pressed by Napoleon I earlier in the century. Thus in a letter to the King of Naples on 6 May 1807 the first French emperor wrote: 'Brother! When you issue coins I would like you to adopt the same valuations as in French money ... in this way there will be monetary uniformity all over Europe [as with de Gaulle, Britain was non-European] which will be a great advantage for trade'. The same letter was written to other heads of state.<sup>27</sup> These sentiments were strongly supported by the French public, even by those opposed to the régime. Victor Hugo, writing in 1855, proposed 'one Continental money, which would drive the activities of 200 million people, instead of all the absurd varieties of money we have today'. 28 Though not then reaching 200 million, France was joined in the Latin Union by Belgium, Switzerland, Italy, the Papal States, Greece and Rumania, while Spain, Austria, Hungary and Bulgaria aligned some of their gold and silver coins to the French system. Germany remained aloof, and was criticised for not even attending some of the conferences. The much smaller Scandinavian Union comprised Denmark and Sweden with the reluctant and partial addition of the more independently-minded Norway. (Plus ça change ...). After a few stumbling decades both unions were swept away by the First World War. In practice they had not amounted to much, but they represent the closest precedent we have to the EMU of

Opinion in Britain was divided, with the manufacturing sector being generally in favour of monetary union and the financial sector mostly being opposed (apparently the converse of today). The Association of Chambers of Commerce of the United Kingdom, in a session held at Birmingham the 16th and 17th of November, 1869, decided unanimously that a report should be presented in favor of the internationalization of Coinage. <sup>29</sup> In contrast, the conclusion of the Bank of England when asked to express its opinion to the International Monetary Conference in Paris, 1881, was not to become involved 'on the ground that a subject partly of abstract science and partly of political application was not its business'. <sup>30</sup> Such divided opinions were rehearsed again

<sup>25</sup> M. Friedman, 'Bimetallism Revisited', Journal of Economic Perspectives (Fall 1990), 97.

<sup>26</sup> H.P. Willis, A History of the Latin Monetary Union (Chicago, 1901), p. 143.

<sup>&</sup>lt;sup>27</sup> 'Correspondance de Napoleon Γ', Tome 15 (Paris, 1854), p. 199.

<sup>28</sup> V. Hugo, Actes et Paroles Pendant L'Exil (Paris, 1861), pp. 138-9.

<sup>&</sup>lt;sup>29</sup> International Monetary Conference, held in Paris, 1878, published by the Government Printing Office (Washington, 1879), p. 383.

<sup>&</sup>lt;sup>30</sup> Sir John Clapham, *The Bank of England* (Cambridge, 1944), II. p. 313. No longer aloof, the Bank successfully coordinated the technical preparations for the integration of Europe's financial markets 'of which London is the biggest international centre by far ... Whether the UK is in or out, the City of London's broad and liquid markets in the euro are an asset for the whole of Europe': *Bank of England Annual Report*, 1999, p. 5. Similarly, 'the Mint has played a full part in the efforts of the European Mint Directors Working Group' and has 'completed contracts to supply copper-plated steel blanks for euro coins from seven of the eleven countries introducing the euro coinage in January 2002' *Royal Mint Annual Report* 1998–99

at tiring length before the Royal Commission on the Precious Metals, 1888. In the end they decided on a very British, pragmatic 'wait and see' policy: 'any scheme which involves a great alteration in our system of currency would be so opposed to the traditions and prejudices of the people of this country, that we think some considerable period of time must elapse before it will have gained that amount of support among the public which will entitle it to be considered as a practicable proposal'. They did not even suggest a referendum; but now at long last our official policy is to 'prepare and decide'.

## The Criteria for Decision

A decent interval of time having now elapsed and a truly great alteration having just taken place on our doorstep involving nearly 300 million of our neighbours, the decision time for the UK would finally appear to be of the highest urgency and priority. Above all it remains a political decision, made by government, not markets, by the still sovereign power, not by the sovereignty of the consumer. The decision as to whether and when to enter into Stage III of EMU is dependent on a referendum if the next or some future (Labour?) government considers the time and price to be right. Though the future decision is to be fully democratic, the criteria on which the government's case is being put forward are entirely economic.

In 1997 the government commissioned an assessment of the economic consequences of EMU from which it derived the following five criteria:

- (a) what would be the effects on employment, growth and stability?
- (b) what would be the impact on financial services and the City?
- (c) how would it affect investment, particularly from overseas?
- (d) if problems emerge is there enough flexibility to deal with them?
- (e) are business cycles and economic structures compatible with those of the Euro-zone so that we could live comfortably with euro interest rates?<sup>32</sup>

The report concludes that membership of EMU has the potential to enhance growth and employment, but only if there were sufficient convergence and flexibility within the UK and EU economies. Obviously to some degree judgement of the outcome is likely to be subjective with the various interested parties supporting their cases with selective statistics. Even the more objective and quantified targets laid down by the Maastricht treaty for calculating convergence were interpreted elastically enough to allow all the applicants to be admitted to the third stage, except Greece, which was then a fudge too far. Since these criteria will also be used for judging future potential entrants – and therefore are relevant to the UK's situation – they too may be briefly summarised:

- (a) consumer prices not to exceed 1.5 per cent above the average in the three best countries of the EU;
- (b) exchange rate to be within the 'normal' bands of the Exchange Rate Mechanism for two years (now 'ERM2');
- (c) long-term interest rates were not to exceed two per cent above the average in the best three countries;
- (d) each national central bank's legislation had to be compatible with that of the European Central Bank and guarantee the political independence of those banks;
- (e) budget deficits were not to exceed three per cent of GDP;
- (f) government debt was not to exceed sixty per cent of GDP.<sup>33</sup>

The fiscal disciplines of the convergence criteria have been carried forward in enhanced form in the 'Stability and Growth Pact'. If fiscal discipline is not enforced the ECB's monetary objectives

<sup>31</sup> Final Report of the Royal Commission on the Precious Metals (London, 1888), p. 53, para. 168.

H.M. Treasury, 'UK Membership of the Single Currency: an Assessment of the Five Economic Tests', October 1997.
 Barclays Bank, 'EMU: a Guide for Business', November 1996.

are thwarted. The Bank's main objective is to help to achieve price stability, defined as an annual increase of retail prices of up to two per cent, with a reference guide for increases in broad money, M3, of  $4\frac{1}{2}$  per cent. None of this should prove to be a barrier to UK entry. The real difficulties lie elsewhere, for example in the EU's apparently arrogant, legalistic and insufficiently accountable bureaucracy; in the multitude of its costly and enterprise-inhibiting rules and regulations; in the appropriate entry level of the pound; in the CAP; in labour immobility, tax harmonisation, unfunded pensions, the rebate – and so on.

According to the European Monetary Institute 'major improvements in convergence have been seen in the EU since 1996'.<sup>34</sup> A more recent research paper by the European Central Bank, in May 1999, concludes that 'in the last ten years central bank policy rules have displayed a remarkable tendency to converge', which is likely to have been a factor helping 'the increased correlation of economic performance'.<sup>35</sup> In other words EU countries have grown more alike, dragooned by their convergent policies. The emphasis on the independence of central banks, according to Professor Charles Goodhart, 'is currently a most fashionable idea' but he warns 'all fashionable ideas are likely to be exaggerated and misleading' and 'it would be sensible to be extremely wary of the idea that the act of granting the ESCB independence from political control will guarantee a much better record'.<sup>36</sup> Some central banks have had to amend their legislation so as to ensure that the total issues of coins come under the ECB as part of its control of the money supply. Surprisingly a somewhat similar 'proposal was made in the year 1780, by Mr. [Edmund] Burke, to abolish the Mint, and place the coinage entirely in the hands of the Bank of England'.<sup>37</sup>

The recent decline of the euro to near parity with the dollar (though particularly welcome to German exporters) again raises the question of universal money: dollarisation merging with euroexpansion. No doubt the controversies concerning the euro will continue to rage, fiercely and finely balanced. In such circumstances of uncertainty a decision is sometimes reached by the toss of a coin - at least it has a fifty-fifty chance of coming down heads ... but whose, our Queen's or, say, Napoleon's or Bismarck's?<sup>38</sup> On this matter our continental friends would do well to consult Howard Linecar's authoritative and beautifully illustrated work on 'Crown Pieces of Great Britain and the Commonwealth' (1962), for he more than most knew that there is nothing better than coins for bringing history to life. There they would see that the coins of George I not only depicted the crown of Charlemagne but also carried an (abbreviated) inscription of his legal title of 'Arch-Treasurer of the Holy Roman Empire' no less.<sup>39</sup> Perhaps now is the time to re-phrase our coins to reflect our historic royal prerogative!

<sup>&</sup>lt;sup>34</sup> European Monetary Institute, 'Convergence Report' (1998), p. 4.

<sup>35</sup> L. Angelona and L. Dadola, 'From the ERM to the Euro: New evidence on Economic and Policy Convergence', European Central Bank, May 1999.

<sup>&</sup>lt;sup>36</sup> C. Goodhart in European Banking, edited by A. Mullineux, (Oxford, 1992), p. 24.

Vi First Annual Report of the Deputy Master of the Mint, 1870 (London, 1871), p. 13.

<sup>&</sup>lt;sup>38</sup> Whereas euro notes are to be uniform, coins may have one side kept for a 'national' design, though both notes and coin are to be legal tender throughout the zone.

<sup>&</sup>lt;sup>39</sup> H.W.A. Linecar, *The Crown Pieces of Great British and the British Commonwealth of Nations 1551–1961*, second edition (London, 1969), p. 41. See also Spink, *Coins of England and the United Kingdom*, thirty-fourth edition (London, 1999), p. 330.

# SHORT ARTICLES AND NOTES SEGO AND DUNO: REASSESSMENT AND REINTERPRETATION

#### DAVID J. HOLMAN

#### SEGO.

AMONG the coins of Tasciovanus, a chieftain of the North Thames tribal area centred around Verulamium (St Albans), are several types bearing legends which have been variously regarded as personal names, place names, titles etc. Of these coins, inscribed RIGON, ANDOCO, DIAS, RVES and SEGO, those of SEGO have a markedly different distribution from the other types and those coins which refer to Tasciovanus only. Recording of metal detector finds from Kent and a reappraisal of the earlier finds has shown an apparent concentration of coins attributed to SEGO in the easternmost part of Kent, an area where coins of Tasciovanus are otherwise very scarce and coins bearing the other names mentioned above are so far unrecorded. The pre-metal detector era finds hinted at a possible leaning towards Kent for the SEGO coins and this has been reinforced by the detector finds. One or two SEGO coins could be easily explained as strays or trade losses (cf. the SEGO stater from Denmark), but the fact that these coins have a concentration in east Kent suggests alternative ideas should be considered. As early as 1792 the Sandwich historian, William Boys, gave a detailed description of a gold stater of SEGO found at Wingham, between Sandwich and Canterbury.

The coinage of Tasciovanus/SEGO consists of five types, namely stater and quarter-stater in gold (VA 1845 & 1848, see pl. 15, 1 & 2), a silver unit (VA 1851, see pl. 15, 3) and two bronze issues with a common obverse design (VA) 1855 and uncatalogued). The stater is the only coin to refer to both Tasciovanus and SEGO and the reverse is of the same type as the Tasciovanus 'horseman' staters (VA 1730-1736). The quarter-stater, an exceedingly rare coin, shows no legend on the reverse of the surviving specimens, but the similar obverse has led both Mack<sup>2</sup> and Van Arsdell<sup>3</sup> to regard this as the fraction of VA 1845. However, at present this cannot be proven. The silver unit mentions SEGO on the obverse; the reverse is of the same type as VA 1747. The bronzes, which are also of Verulamium style and typology are of particular interest. One type (VA 1855, see pl. 15, 4) allies an obverse depicting an eight-pointed star with a sphinx reverse and bears

the legend SEGO on the reverse, first suggested by Allen from a com found in Canterbury4 and now confirmed by a specimen from Sandwich. The other type (VA - , see pl. 15, 5) bears the same obverse design (although no die-link has yet been confirmed), but the reverse displays a bull stylistically identical to that on a Verulantium issue of Tasciovanus (VA 1808) although with the addition of what appears to be a letter S behind the bull. The star pattern on both SEGO bronzes is itself also very similar to VA 1808, but crescents joining the points of the star replace the legend VERLAMIO. The variant form of SEGO bronze is now known from six specimens, all from east Kent, including one found in a stratified deposit in a pit immediately below a substantial 'Belgic' pottery dump of early to midfirst century AD date during an archaeological excavation on a rural site at Maydensole Farm near Dover in 1997.5 Interestingly for a coinage which on stylistic and typological grounds, was apparently produced at Verulamium, the coinage of SEGO is notably rare in Hertfordshire, with only a single stater recorded, and these types are seemingly absent so far from the major sites at St Albans and Braughing. A survey of Iron Age coins from Northamptonshire also shows a total lack of SEGO coins.6 The other named types mentioned above all have a clear North Thames distribution as one would expect. It is tempting to speculate on the possibility that the SEGO coins represent an attempt by Tasciovanus to gain power in east Kent with the resulting control of the shortest cross-Channel trading

Recent discoveries and research has led to the realisation that coins referring to SEGO do not appear to be linked solely to Tasciovanus. Among the diverse coinage of Cunobelin, a solitary type can be seen as possibly referring to SEGO, this being the bronze 'Ship' type (VA 1989, see pl. 15, 6) which bears a reverse legend now clearly read as SE, the legend being split by a depiction of Victory. This type also shows a primarily Kentish distribution on current evidence. The apparent alteration of the obverse legend from CAMV to CVN on the excavated Canterbury specimen may indicate that, although the dies were cut at Camulodunum, the actual striking took place at a mint in Kent, evidence for the existence of which is

<sup>1</sup> W. Boys, Collections for an History of Sandwich (Canterbury, 1792), p. 869.

<sup>2</sup> R.P. Mack, The Coinage of Ancient Britain (M), 3rd edition (London, 1975).

<sup>3</sup> R.D. Van Arsdell, Celtic Coinage of Britain (VA) (London, 1989).

<sup>&</sup>lt;sup>4</sup> D.F. Allen, 'The Origins of Coinage in Britain, A Reappraisal', in *Problems of the Iron Age in Southern Britain*, ed. by S.S. Frere (London, 1960), at p. 222.

<sup>&</sup>lt;sup>5</sup> For note of site, see Britannia 28 (1997), 453 (A. Redding, pers. comm.).

M. Curteis, 'An Analysis of the Circulation Patterns of Iron Age Coins from Northamptonshire', Britannia 26 (1995), 36-7.

seen in the style of certain other types of Cunobelin.<sup>8</sup> The possibility that coins bearing a legend commencing SE were intended for circulation in Kent has previously been suggested by Muckelroy *et al.*<sup>9</sup>

The final coin type to bear a possible SEGO legend is a silver issue of Amminus not catalogued by either Mack or Van Arsdell, but which has been published in the Danicourt collection at Peronne, see pl. 15, 7.10 The reverse of this type depicts a biga with the letters SEC in the field around it. If it is accepted that this is another example of the interchangeable C and G which can be paralleled, for example, in the late Gaulish bronzes of Germanus Indutilli L, sometimes rendered as CERMANUS etc. 11 then there can be little objection to this being read as SEG--. Once again, this type has a Kentish distribution, as with the other types of Amminus, and it was almost certainly produced at a mint in Kent, possibly at the mysterious DUNO (see below). One example of this type was found in the Rozel (Jersey) hoard of 1875, a hoard buried c.38 BC, leading Allen to conclude that it probably referred to another, Gaulish, Amminus. 12 There are suggestions that this coin is intrusive and a stylistic study of the type adds weight to this theory. The style of the horses on the reverse is identical to the forequarters of the hippocamp on the reverse of the Amminus silver unit VA 194, which also shares the feature of lettering with pelleted terminals. This type of lettering, along with pelleted limbs, is also found on two silver issues of Cunobelin which are probably from a Kentish mint (VA 2067 and an uncatalogued type). It therefore seems likely that the biga type is a late issue and does belong to Amminus' Kentish series.

This leaves the question as to what SEGO on the coins is referring to. The styles of the three proposed SEGO series differ from one another, with Verulamium, Camulodunum and Kentish elements being evident. They do not appear to be from the same workshop, which would seem to eliminate the possibility of SEGO referring to a mint name. It is also unlikely to be a single personal name, the issues of Tasciovanus and Amminus being separated by at least 35 years. There is no possibility of a connection with the Segovax mentioned by Caesar. 13 The fact that it appears on three different metal issues eliminates the possibility of it being a denomination name. All three series have a primarily Kentish distribution and the current writer suggests that SEGO may have been a title meaning 'Powerful' or 'The Powerful One' or something similar (from Celtic sego, meaning strong, powerful etc)14 The legends SEGO, SE and SEC can then be explained as a proclamation of authority by rulers who do not appear, on the numismatic evidence, to have had their lineage in the Kentish dynasty(s), but who wished to make their authority known in their newly acquired territory by using a term which would be understood. The possibility of SEGO being a title is also hinted at by the use by Tasciovanus of the legend RIGON, which has sometimes been interpreted as 'king'. <sup>15</sup> Titles are also known on Gaulish coins, particularly bronze issues of the Lexovii (arcantodan (DLT 7166)<sup>16</sup> and vergobret (DLT 7159)) (Allen 1980, 125–6). <sup>17</sup>

Map I shows the distribution of each of the three SEGO coin series. Not marked on the map are Tasciovanus/SEGO coins from 'Kent' and Denmark and an Amminus/SEC coin from Jersey.

## **DUNO**

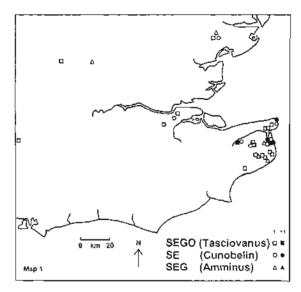
The legend DUN or DUNO, which appears on two types of Amminus (c.35–c.40 AD), one of silver (VA 192, see pl. 15, 9) and one of bronze (VA 193, see pl. 15, 8), is generally accepted as referring to a place name and the site of the mint responsible for the production of these coins. <sup>18,19</sup> The location of this mint is unknown, but it is sometimes identified with Canterbury. <sup>20</sup> supposedly the major late Iron Age settlement of east Kent and subsequently the Roman *civitas* capital of *Durovernum Cantiacorum*. An alternative possibility is suggested by Rivet & Smith, who prefer to associate DUNO with an unidentified hillfort in Kent (from British *dunon*, meaning hill). <sup>21</sup>

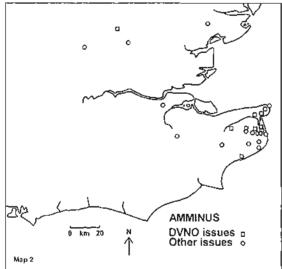
There are certain objections to DUNO being attributed to Canterbury on the current evidence. Firstly, the name itself would appear to refer to a site on a hill, which does not fit the location of Canterbury in the valley of the River Stour. The name *Durovernum* has been translated as 'the walled town by the alder-swamp', <sup>32</sup> The nearby hillfort of Bigbury cannot be discounted, but there is no evidence that it was occupied after the end of the first century BC (although excavations have been limited). In any case, there is no clear reason why DURO – should be incorrectly rendered as DUN or DUNO on at least four different dies.

Secondly, a study of the 140 Iron Age coins currently recorded from within the area enclosed by the later walled city reveals a currently unexplained drop in the incidence of coinage lost during the reign of Cunobelin, which may suggest a lessening of activity there at this time; this is

- <sup>8</sup> D.J. Holman and K. Parfitt, Iron Age Coinage in East Kent (forthcoming).
- <sup>9</sup> K. Muckelroy et al., as in n. 7, at p. 440.
- 10 S. Scheers, Les Monnaies Gauloises de la Collection A. Danicourt à Péronne (Brussels, 1975), catalogue number 273.
- 11 S. Scheers, La Gaule Belgique (Sch) (Paris, 1977), p. 810.
- 32 D.F. Allen, 'Did Adminius strike coins?' in Britannia 7 (1976), 96-100.
- <sup>13</sup> Caesar, Commentarii de bello gallico (DBG, V, 22, 3).
- <sup>14</sup> A. Holder, Alt Keltischer Sprachschatz, Vol. 2 (Leipzig, 1896), pp. 1444–52.
- <sup>15</sup> P. De Jersey, Celtic Coinage in Britain (Princes Risborough, 1996), pp. 35-6.
- <sup>16</sup> H. De La Tour. Atlas des Monnuies Gauloises (DLT) (Paris, 1892).
- <sup>17</sup> D.F. Allen, The Coins of the Ancient Celts, edited by D. Nash, (Edinburgh, 1980), pp. 125-6.
- 18 D.F. Allen, as in n. 12.
- 19 D. Nash, 'Adminius did strike coins', Ox. Journ. Arch. 1 (1982), 111-14
- <sup>20</sup> C. Haselgrove, Iron Age Comage in SE England (Oxford, 1987), 143–4.
- <sup>21</sup> A Rivet and C. Smith, The Place Names of Roman Britain (London, 1979), p. 344.

<sup>&</sup>lt;sup>7</sup> K, Muckelroy, C. Haselgrove and D. Nash, 'A Pre-Roman Com from Canterbury and the Ship represented on it', in *Proc. Preh. Soc.* 44 (1978), 440.





also hinted at by the apparent absence of brooches of contemporary date and an apparent gap in the amphora supply. 23 The possibility that the main occupation nucleus in Canterbury at this time lay elsewhere and is yet to be located cannot be discounted, but the coincidence is striking. The lack of coinage of Cunobelin is surprising and does not reflect coin losses in the rest of east Kent, where his coins are now reasonably common finds. The status of Canterbury prior to the Roman Conquest has not yet been ascertained;24 although it was clearly a major and significant site by east Kent standards, there is no evidence that it was notably pre-eminent in the same way as, for example, Verulamium or Colchester. The fact that it later became the civitas capital need have no bearing on this discussion, as this does not prove that it was the principal settlement of east Kent prior to the Roman Conquest.

Finally, the main distribution of Amminus' coinage is demonstrably to the east of Canterbury, although no site has yet produced more than two coins of Amminus, thus rendering it impossible to suggest with any degree of certainty any particular site as the location of DUNO. Canterbury itself has a single bronze coin recorded to date.

Recording of metal detector finds has led to the realisation of several other significant late Iron Age sites in east Kent, some of which have been confirmed by archaeological investigation. These sites provide alternatives for the location of DUNO and confirm that any uncritical attribution to Canterbury should be challenged. Among these sites, perhaps the major Iron Age site around the Roman (and almost certainly Iron Age) temple at Worth, near Sandwich, 25 is the strongest contender as an alternative location for DUNO. The coin evidence (including two bronzes of Amminus) shows a considerable increase in activity during the reigns of Eppillus and Cunobelin, in direct contrast with Canterbury, 26 and it is situated on a peninsula extending into the surrounding marshland; although only reaching 13 metres above OD, it clearly appears as a hill when seen from all directions except the north. However, this cannot be more than informed speculation based on current evidence: regrettably, it seems likely that coins of Amminus will continue to be of sufficient rarity to prevent any further research on this point, at least in the foreseeable future.

Map 2 shows the distribution of 'DUNO' and 'other' coins of Amminus. Not marked on the map are 'DUNO' coins from Wiltshire and Dorset and an 'other' coin from Jersev.

The writer would like to thank Dr. Philip de Jersey of the Celtic Coin Index for kindly providing the photograph of the quarter stater of Tasciovanus/SEGO (VA 1848).

#### Key to Plate 15

- 1 A Stater of Tasciovanus/SEGO (VA 1845)
- 2 A 1/4-stater of Tasciovanus/SEGO (VA 1848)
- 3 R of Tasciovanus/SEGO (VA 1851)
- 4 Æ of Tasciovanus/SEGO (VA 1855)
- 5 Æ of Tasciovanus/SEGO (VA -)
- 6 Æ of Cunobelin/SE (VA 1989)
- 7 Æ of Amminus/SEC (VA -)
- 8 Æ of Amminus/DUNO (VA 193)
- 9 AR of Amminus/DUN (VA 192)

<sup>&</sup>lt;sup>12</sup> A. Rivet and C. Smith, as in n. 21, at pp. 353-4.

<sup>&</sup>lt;sup>23</sup> K. Blockley et al., Excavations in the Marlowe Car Park and Surrounding Areas (Canterbury, 1995), p. 11.

<sup>24</sup> K. Blockley et al., as in n. 23, at pp. 50-3.

<sup>&</sup>lt;sup>25</sup> W.G. Klein, 'Roman Temple at Worth, Kent', Ant. Journ. 8 (1928), 76-86.

<sup>26</sup> D.J. Holman and K. Parfitt, as in n. 8.

## EALDNOD, A NEW MONEYER FOR OFFA

#### LORD STEWARTBY

A new portrait penny of Offa provides the name of a previously unrecorded moneyer, as well as a new combination of types. The coin may be described as follows:

Obv. Roman-style bust right, with diademed head enclosed within a beaded border. Inscription +OFFA+/+ REX (the R inverted), broken by the

+EAL/dNOd (lozenge 0) in two lines, separated Rev. by a bar with floral ends; a pellet in each quarter of the initial cross, and other scattered pellets.

Wt. 19.6 gr.; die-axis 090°.





The nearest parallels to the obverse type are coins of Ciolhard (B.23) and Ealmund (B.44). These also have a diademed head with the drapery (or cuirass) shown in a similar way, but their inscriptions begin above the dexter shoulder instead of at the top of the coin, and without the crosses between OFFA and REX. Other comparable portrait types, but less finely wrought, are by Pehtwald (B.75) and Winoth (B.82), while Pendred (B.76-8; cf. SCBI Mack 566) has a related bust type, but with the inscription divided at the top by small entwined serpents.

The Ealdnod reverse type is one that was used, although not with a portrait obverse, by several other

moneyers - Dud (B.25), Alhmund (B.40), Ethelnod (B.53-4) and Ethelwald (B.55). Dud's and one of Ethelnod's (B.54) have the same design on their obverses.

Ciolhard's coins are attributed, with reasonable confidence, to London.2 Less certainly, but still I think probably, Alhmund-Ealmund, Pendred and Winoth may be regarded as Mercian moneyers. Although Chick suggests that Pehtwald (whose related portrait coin is of coarser style) may have been a Canterbury moneyer, he accepts that the attribution is uncertain as between London or Canterbury.3 On the basis of the obverse type and style, therefore, the associations of the coin of Ealdnod, which is of fine work, seem to lie primarily with coins of probable Mercian moneyers.

The reverse type is less indicative. Dud, Alhmund and Ethelwald are probably Mercian, but Ethelnod must be Kentish on the evidence of his coin of Eadberht Praen. Also, the same type was used on the Offa side of most of the coins of Archbishop Jaenberht (B. 125-31). The use of pellets in the angles of the initial cross, however, may be seen as a connecting link between the coins of Ealdnod and Dud, which would support the case for Ealdnod being a London moneyer.

No other coin of this period (or, I believe, of any later one) is known with the name Ealdnod, although there was a productive East Anglian moneyer named Eadnoth in Offa's reign. The protothemes Ead - and Eald - are distinct, the former being much the commoner. No Ealdnod (or Ealdnoth) features in Searle's Onomasticon, and Dr. Veronica Smart has kindly confirmed to me that this appears to be the first recorded occurrence of the name.

## A MISSING COIN OF ÆLFRED REDISCOVERED

#### HUGH PAGAN

In their authoritative republication of the celebrated Trewhiddle hoard of ninth-century coins and metalwork, Sir David Wilson and the late Christopher Blunt drew attention to the fact that of the two coins of Aelfred of Wessex associated with the hoard by earlier writers, one, a coin of Aelfred's Two-Line type by a moneyer Franbald, was of rather later date than any other coin supposed to derive from the hoard.1

At the time Wilson and Blunt were writing, both the

numismatic content of the Trewhiddle hoard and the chronology of Aelfred's coinage were somewhat uncertain, and not all the assumptions guiding their discussion of the hoard's date of deposit are correct, but they were right to recognise that this coin of Two-Line type was likely to have been struck no earlier than the mid 880s, making it a very definite outsider in a hoard in which no other coin can have been struck later than the early 870s. Although the coin had been illustrated on plate 28 of

- <sup>1</sup> B. refers to C.E. Blunt, 'The Coinage of Offa', in R.H.M. Dolley (ed.), Anglo-Saxon Coms (1961), pp. 39-62.
- <sup>2</sup> I. Stewart, 'The London Mint and the Coinage of Offa', in M. Blackburn (ed.), Anglo-Saxon Monetary History (Legester, 1986), pp. 27-43.

  D. Chick, 'Towards a Chronology for Offa's Coinage: An Interim Study', Yorkshire Numismatist 3 (1997), pp. 47-64. I am
- indebted to Mr Chick for helpful comments.
- D.M. Wilson and C.E. Blunt, 'The Trewhiddle hoard', Archaeologia xcviii (1961), 75-122 and plates XXII-XXXI. The coin of Franhald is discussed on p. 113 and its illustration in Ruding is reproduced on plate XXXI.

Ruding's Annals of the Coinage of Great Britain [Fig. 1], and had featured as part of lot 230 in the E.W. Rashleigh sale (Sotheby, 21 June 1909 following), Wilson and Blunt were unable to discover what had happened to it since 1909, and they had thus to leave its association with the hoard more of an open question than they would have wished; for, as they were aware, coins that are in reality part of the Trewhiddle hoard share a distinctive coppery patination, occasioned by the fact that the hoard was discovered in a disused mine working, and a sight of the coin would have shown whether it possessed that pating or not.

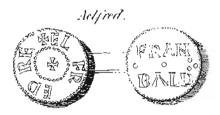


Fig. 1

Since no other example of a coin of this moneyer and type has ever been recorded, it is reasonable to suppose that the coin which featured as lot 423 in the 1999 sale by Sothebys of the L.R. Stack collection is the missing Rashleigh specimen. A comparison between the illustration in Ruding and a photograph of the Stack specimen [Fig. 2] is certainly sufficient to suggest that the coin is the same, making due allowance for the fact that the engraver of the illustration in Ruding would have been working from a drawing of the coin rather than from the coin itself. Additionally, the weight of the Stack specimen, 1.36 g. (= 21.0 grains), is the same as the recorded weight of the Rashleigh specimen, 21 grains, and this remains a striking coincidence, even if, as was the case, the weights printed in the Rashleigh sale catalogue were only given to the nearest grain or half-grain.

It was thus satisfactory for the present writer to discover on viewing the Stack coin prior to the sale that although it was a toned coin, possessing a patina, the patina was not coppery and there was no sign that the coin had ever had the familiar Trewhiddle discolouration.

It can therefore now be asserted with confidence that although this coin of Aelfred formed part of the Rashleigh





Fig. 2

family collection, initially created by Philip Rashleigh (1729–1811), the Cornish landowner and Member of Parliament into whose possession the majority of the coins from the Trewhiddle hoard passed shortly after their discovery, the coin itself, like various other Anglo-Saxon coins owned by Philip Rashleigh, had reached him from a different source.<sup>2</sup>

This indeed is strongly supported by the fact that the very earliest surviving lists of coins from Trewhiddle, preserved among Rashleigh papers now in the Department of Coins and Medals, British Museum, omit not merely this coin of Aelfred but also the remaining coin of Aelfred subsequently associated with the hoard, a coin of Lunette type by the moneyer Sigestef. This coin also could not be traced by Wilson and Blunt after its appearance in the E.W. Rashleigh sale, in which it was part of lot 225, so its patination remains uncertain, but if neither coin in reality belonged to the hoard, the board's remaining numismatic content requires a date of deposit no later than c.868 and this is the date to which current scholarly opinion inclines.<sup>3</sup>

It is proper to note that this rediscovered coin of Franbald is now in the writer's possession and that it belongs to a category of coins of Two-Line type associated by Blackburn with moneyers working in the Danelaw. Franbald's name should therefore be added to the tabular listing of such moneyers, or apparent moneyers, given by Blackburn at p. 346 of his article on 'The Earliest Anglo-Viking Coinage of the Southern Danelaw (late 9th century)', printed in the Proceedings of the 10th International Congress of Numismatics, London, September 1986 (1990), pp. 341-8.

One slightly unusual feature of the present coin is the fact that the inner circle on its obverse is beaded, and this may in time enable Franbald's production to be linked with the production of other contemporary Danelaw moneyers whose coins also display this feature.

<sup>&</sup>lt;sup>2</sup> It features as coin no, 62 in a list of coins belonging to Philip Rashleigh compiled by Taylor Combe of the British Museum in July 1802 (Wilson and Blunt, ep. cit., p. 111), but the Combe list includes several coins certainly not from the Trewhiddle hoard and is evidence only for the fact that the coin was by then in Rashleigh's possession.

<sup>&</sup>lt;sup>1</sup> H.E. Pagan, 'Coinage in Southern England, 796-874', in *Anglo-Saxon Monetary History*, edited by M.A.S. Blackburn (1986), pp. 61-2 and note 31; cf. M.Blackburn and H. Pagan, 'A revised check-list of coin hoards from the British Isles, c.500-1100', in Blackburn, op cit., hoard 59 on p. 294. The Sigestef coin is no. 61 in the Taylor Combe list previously cited.

# THE MISSING COINS OF STEYNING LOCATED

MICHAEL SHARP!

The discovery of a type III of Henry I reading HRMIIN ON STENI (Fig. 1) provokes thought. The mint signature is clearly that of Steyning<sup>2</sup>, a mint once thought to have closed at the end of William II's reign. The moneyer is otherwise known for type IV of William II reading HIRMAN ON STIII (NCirc 1983, 333 and SCBI 27, 1511, ex Samuel Sharp and a die duplicate), a type I of Henry I reading HERMIIN ON STN (BMC 15), a type VII reading hERMAN ON STA (BM) and a type XIV reading hERMAN ON STAN (SCBI 27, 1517), all of which have been ascribed to Stamford. On the evidence of the mint signature for the type III, it is argued that these coins be reattributed to Steyning. The existence of a type VII of York (SCBI 21, 791) provides the only doubt.

In the first quarter of the tenth century Stantford was spelt Steanford but the E was dropped soon after, where as Steyning was spelt Staninges in Domesday and the mint signature shown in various forms of Staen or Steni.





Fig. 1

Stamford lacked both an E and an I and it is pertinent to mention that Steyning is pronounced 'Stenning' as opposed to 'Staining'.

That Steyning is now shown to have been operative in the reign of Henry I would seem to endorse the attribution of a type VII of Stephen to it.<sup>3</sup>

My attention has also been drawn to a type III of William I reading MANEPINE ON STAN. With Manewine otherwise known only for Dover, it may be that this too is a coin of Steyning.

# THE FILLONGLEY HOARD – A MEDIEVAL COIN AND JEWELLERY HOARD FROM WARWICKSHIRE

PHILIP J. WISE

A medieval hoard was discovered in 1997 during several searches of farmland near the north Warwickshire village of Fillongley by two metal detectorists, Roy English and Robert Foster. A total of 127 complete or fragmentary coins and three pieces of jewellery were recovered. There was no evidence that the hoard had been buried in a pot or other container. The findspot was located in an arable field which had been deep ploughed for the first time in 1996. The hoard was the subject of two Treasure Trove Inquests as a result of its discovery over a period of seven months. At both inquests the jury found that the items under consideration were Treasure Trove. The entire hoard was purchased by the Warwickshire Museum in 1998.

Almost all the coins in the hoard are Short Cross pennies and of these the majority are of classes V and VI, which cover the period 1204/5-1217/8. Only three cut halfpennies were recognised (nos. 17, 110 and 112). Eleven English mints are represented with more than half of the identifiable coins being from London (78), and the next largest group being from Canterbury (13). The remaining nine mints have comparatively low totals – four coins from York, three each from Winchester and Chichester, two from Oxford and Ipswich, and one from Durham, Exeter, Lincoln and Norwich. Twelve coins

come from uncertain or unidentifiable mints. There is also an Irish penny of John, three Scottish sterlings of William the Lion (1165–1214) and two German sterling imitations. The latest class represented in the hoard is class VIb2 which suggests that the date of deposition was c.1215.

The Fillongley Hoard may be broken down into the standard Short Cross classification as follows: class I (4), class III (2), class IV (4), class V (70) and class VI (24) with the remainder (17) either class V or class VI. Amongst the mints, excluding London, individual moneyers are represented by single coins with the exception of two Canterbury moneyers, Arnaud with three issues and Hue with two, and Willelm of Chichester also with two. The London issues are dominated by four moneyers – Ilger with 17 examples, of classes Vb, Vc, VIa and VIb; Walter with 15, mainly of class Vc or VIa; Rauf with 10, again of class Vc or VIa, and Abel also with 10, of classes Vc, VIa and VIb.

The coins have been considerably damaged by ploughing. Only about half the total of the uncut pennies, some 63 coins, are complete and undamaged, a further 12 are complete, but damaged and the remaining 49 are fragmentary to a greater or lesser degree. The complete and undamaged coins have an average weight of 1.34 g, which

- Grateful thanks are due to Marion Archibald, William Conte and Roger Hudson.
- <sup>2</sup> H.H. King, 'The Coins of the Sussex Mints, Part II; Hastings and Steyning', BNJ 28 (1957), 26D-63.
- <sup>3</sup> M. Sharp, 'A Steyning Coin of Stephen', BNJ 52 (1982), 241.

<sup>&</sup>lt;sup>1</sup> Warwickshire Museum accession number 37/1998, I am grateful to Martin Allen and Barne Cook for their assistance in identifying the Fillongley Hoard and for their comments on the significance of individual coins. I would also like to thank Stanley Ireland for his help in recording this hoard

is significantly below the standard weight (22.3 gr or 1.45 g) of a Short Cross penny at this period and indicates that some clipping has occurred.<sup>2</sup>

Only a few of the coins merit individual attention. The earliest coin in the hoard is a class Ia5 issue of Fil Aimer of London (no.34). There is an unusual class VIa1 penny of Rauf of London (no.72) which has an 'odd face' and may be compared with an example in the British Museum.<sup>3</sup> A class VIa issue of Ilger of London has an obverse overstruck with an unidentifiable reverse die (no.96). A penny of Rauf of Chichester (no.85) was struck from a very unusual class Vb2 obverse with ornamental letters.<sup>4</sup> There is one mule in the hoard – an issue of Simun of Canterbury with a class Vb1 obverse and Va2 reverse (no. 86). Lastly there are two German sterling imitations (nos. 10, 66), both of Stewartby's Group RE, no. 4.<sup>5</sup>

As well as the Fillongley Hoard two other hoards have been found which were buried in the early years of the thirteenth century. Firstly at Tockholes, near Chorley in Lancashire, where sixty coins were found in 1973. The probable deposition date is c.1220. As with the Fillongley Hoard there are very few coins struck before the recoinage of 1205, although by contrast the Tockholes Hoard closes with a strong representation of coins struck early in class VII.6 Secondly a much smaller hoard of thirty-nine coins was recovered from Teston, near Maidstone in Kent, in 1846.7 This is now thought to have been deposited between c. 1207 and c. 1220 on the grounds of the presence of the London moneyers Abel, Rauf and Walter and the absence of class VII moneyers.8 In all three hoards the majority of coins were minted in London, followed at some distance by Canterbury and with only one or two coins from other regional mints. However in terms of relative proportions, the Tockholes and Teston Hoards have coins of the London and Canterbury mints present in a ratio of 3:1, whereas in the Fillongley Hoard the ratio is 6:1. The dominance of the London mint in this hoard is remarkable and it is surprising that the regional mints near the findspot are so poorly represented.

The Fillongley Hoard is notable for the presence of three pieces of silver jewellery. These are a finger ring and two brooches, one being an inscribed ring brooch. The presence of a ring brooch in a hoard buried c.1215 is of very considerable interest to medieval jewellery specialists, as this type is normally dated to much later in the thirteenth century. Hoards containing both coins and

jewellery are very rare in medieval England. In the midnineteenth century a mixed hoard was found at Lark Hill, Worcester, which contained 210 coins, seven finger rings and a brooch. 10 A second, smaller, hoard from Brackley, Northamptonshire, contained thirteen coins and a silver ring set with a rock crystal. 11 Both were probably buried around 1173-4, some forty years earlier than the Fillongley Hoard. Closer in date is the hoard from Cross on the Hill, near Stratford-upon-Avon, Warwickshire, which according to Nicholas Palmer and Wilfred Seaby is likely to have been deposited either c.1207-9 or c.1214-17.12 This hoard was found in 1830 and originally consisted of around 1,000 coins, a silver seal and a gold ecclesiastical ring. Only seventeen coins, the seal and the ring are extant today. The concentration of these mixed hoards in the west and south Midlands is notable, but perhaps fortuitous.

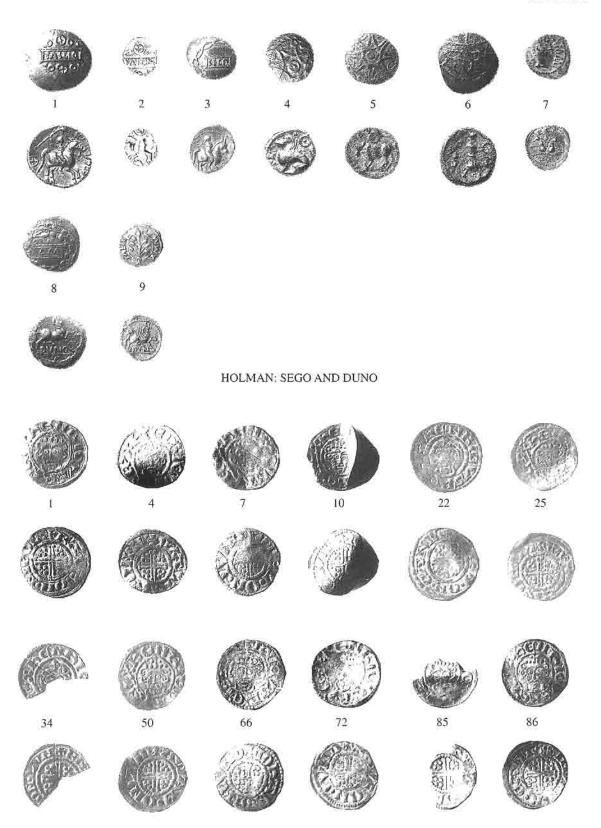
### **CATALOGUE**

O. marila in				
Canterbu	*	61	127 1 1 7 1	
No.	Moneyer	Class	Weight (g)	
28	Arnaud	Vb2	1.14	
88	Arnaud	Vb2	1.38	
67	Amaud	Vc	1.36	
49	Goldwine	Mab2	1.32	
17	Coldwine	٧b١	1.29	
31	Hue	٧b١	1.18	
82	Hue	Vc	0.96	
20	Iohan	Vb2	1.25	
43	Iohan M	Vb	0.46	
16	Meinir	ĮVa	1.04	
75	Samuel	Vc	1.34	
86	Simun	Vb1/Va2	1.30	
22	Ulard	IVa	1.38	
Chicheste	2)*			
85	Rauf	Vb2 orn.	0.83	
29	Willelm	Vb2	1.19	
64	Willelm	Vb2	1.37	
Durham				
97	Pieres	Vb2	1.39	
-			- •	
Exeter				
8	Iohan	Vb2	1.26	

<sup>&</sup>lt;sup>2</sup> Documentary evidence indicates that 242 pence were struck from a Tower pound in the reign of Henry III (1216–72). See C.E. Blunt and J.D. Bland, 'Mint Output of Henry III', *BNJ* 39 (1970), 62–3; C.E. Challis (ed.) *A New History of the Royal Mint* (Cambridge, 1992), p. 673.

- <sup>3</sup> Ian Stewart, 'English Coinage in the Later Years of John and the Minority of Henry III part 1', BNJ 49 (1980), 39.
- <sup>4</sup> M.R. Allen, 'The Provision and Use of Dies for Short Cross Class V', BNJ 59 (1989), 46-76; Chichester obverse die 10.
- 5 Lord Stewartby, 'German Imitations of English Short-Cross Sterlings', NC 155 (1995), 224-5, 241.
- 6 M.M. Archibald and B.J. Cook, 'English Medieval Coin Hoards' I, (forthcoming 2000).
- <sup>7</sup> J.B. Bergue, 'Further Remarks on the Pennies of Henry with the Short and Long Cross', NC 10 (1847-8), 26-42; J.D.A. Thompson, 'Inventory of British Coin Hoards', RNS (1956), 134.
- 8 The earlier dating of this hoard to c.1220 is extremely speculative as it was published before the introduction of classifications of the Short Cross coinage. I am grateful to Martin Allen for his comments on the dating of the Teston Hoard.
  - <sup>9</sup> P.J. Wise, 'Fillongley, A Medieval Coin and Jewellery Hoard', West Midlands Archaeology 40 (1997), 79-80.
  - <sup>10</sup> J.Y. Akerman, 'Account of silver rings and coins discovered near Worcester', Archaeologia xxxvi (1855), 200-2.
  - <sup>11</sup> M.M. Archibald and B.J. Cook, 'English Medieval Coin Hoards' I, (forthcoming 2000).
- <sup>12</sup> N. Palmer and W.A. Scaby, 'An Early Thirteenth Century Hoard from Cross on the Hill, near Stratford on Avon', Trans. Birmingham Warwickshire Archaeol. Soc. 93 (1989), 105-10.

No.         Moneyer         Class         Weight (g)         No.         Moneyer         Class           Ipswich         115         Walter         Vc or VI           81         Alisandre         Vb2         0.98         33         Walter         Vc-VIa2           108         Iohan         Vb2         1.31         4         Walter         VIa1           Lincoln         78         Walter         VIa1           1         Rauf         Vb1         1.33         23         Wa(l)ter         VIb1	al 0.82 0.64 1.39 1.34 1.36 1.29 1.26 1.38
Ipswich	al 0.82 0.64 1.39 1.34 1.36 1.29 1.26 1.38
81         Alisandre         Vb2         0.98         33         Walter         Vc-VIa2           108         Iohan         Vb2         1.31         4         Walter         VIa1           24         Walter         VIa1           Lincoln         78         Walter         VIa1           1         Rauf         Vb1         1.33         23         Wa(l)ter         VIb1	0.64 1.39 1.34 1.36 1.29 1.26 1.38
24   Walter   VIa1	1.34 1.36 1.29 1.26 1.38
Lincoln         78         Walter         VIal           1         Rauf         Vb1         1.33         23         Wa(I)ter         VIbI	1.36 1.29 1.26 1.38
1 Rauf Vb1 1.33 23 Wa(I)ter VIb1	1.29 1.26 1.38
	1.26 1.38
00 11011	1.38
98 Willelm Vb2	
London         104         Willelm B         Vb2           57         Abel         Vc         1.29         56         Willelm L         Vb1	1.25
99 Abel Vc 1.08 101 Willelm T Vb1	1.35 1.30
109 Abel Vc 1.44 36 Willelm T Vb2	0.73
111 Abel Vc 1.07 59 Willelm T Vb2	1.40
7 Abel VIal 1.29 73 Willelm T Vb2	1.33
51 Abel VIal 1.24 32 uncertain -	
52 Abel VIa1 1.34 Willelm,	
61 Abel VIal 1.32 Willelm B,	
6 Abel V(b) 1.33 L or T Vb2	1.05
95 Abel VIb1 1.35 112 uncertain Vb	0.62
50 Adam Vb3 1.32 45 uncertain Vb or Vc	0.27
62 Adam Vc 1.36 44 uncertain Vc	0.45
113 Adam Vc 0.98 120 uncertain Vc	0.43
42 Beneit Vb2-Vc 0.62 74 uncertain Vc or VIs	
34 Fil Aimer Ia5 1.05 48 uncertain V or VI 18 Gefrei Ic 1.31 116 uncertain V or VI	0.18 0.35
18         Gefrei         Ic         1.31         116         uncertain         V or VI           106         Ilger         Vb1         1.24         117         uncertain         V or VI	0.29
92 Ilger Vb3 1.36 46 uncertain Vlb2?	0.26
14 Ilger Vc 1.39	0.20
40 Ilger Vc 0.63 Norwich	
60 Ilger Vc 1.30 58 Gifrei Vb3	1.37
76 Ilger Vc 1.40	
84 liger Vc 1.34 Oxford	
91 Ilger Vc 1.33 3 Ailwine Vb1	1.29
103 Ilger Vc or VIal 1.36 100 Miles Vb2	1.32
83 figer Vc or VIal 1.32	
96 Ilger Vc or VIa 1.44 Winchester	1.21
102         Ilger         VIa1         1.35         12         Bartelme         Vb3           35         Ilger         VIa2         0.81         2         Miles         Vb2	1.31 1.33
	1.33
26 Ilger Vib1 1.34 71 Rauf Vb2 21 Ilger Vib2 1.31	1.55
69 Ilger VIb2 1.38 <i>York</i>	
125 Ilger VIb2? 0.51 37 Davi Vb1	1.32
65 Rauf Vc 1.33 77 Everard IVa	1.21
89 Rauf Vc 1.39 87 Nicole Vb2	1.13
93 Rauf Vc 1.49 39 Tomas Vb)	0.91
94 Rauf Vc 1.33	
107 Rauf Vc 1.32 Uncertain mint	0.46
90 Rauf Vc or VIa 1.36 79 uncertain Ia5 or Ib1	0.46 0.58
13 Rauf VIal 1.37 110 uncertain Ib 27 Rauf VIal 1.30 41 Willelm IIIab2 or	
	0.77
55 Rauf VIal 1.37 38 uncertain Vb1 72 Rauf VIal 1.30 123 Alisandre Vb or Vc	0.28
30 Raulf VIb2 1.00 124 uncertain V	0.28
122 Rau(1)f VJb2 0.41 114 uncertain –	
70 Ricard IVa 1.28 Willelm,	
5 Walter Vc 1.41 Willelm B,	
9 Walter Vc 1.30 Lor T Vc	0.45
15 Walter Vc 1.38 118 uncertain Vb2-VIa	0.27
19 Walter Ve 1.31 47 uncertain V or VI	0.25
25 Walter Vc 1.22 121 uncertain V or VI	0.22
105 Walter Vc 1.30 126 uncertain V or VI	0.27 0.17
80 Walter Vc 0.73 127 uncertain V or VI	V, I /
63 Walter Vc or VIa1 1.43	



WISE: FILLONGLEY HOARD

No.	Moneyer	Class	Weight (g)	No.	Moneyer	Class	Weight (g)
Ireland				Imitatio	ns		
11	Roberd of Dublin	3rd (Rex)	1.31	10	Iohan of London	Group RE, no.4	
Scotland						(Stewartby)	1.28
53	Rauf of Roxburgh?	A	1.38	66	Iohan of London	Group RE,	
54	Hue & Walter	В	0.87			no.4	
119	uncertain	_	0.33			(Stewartby)	1.36

## THREE SHORT CROSS PROBLEMS

#### JEFFREY P. MASS

THE Short Cross series is renowned for its intractable research problems. Among the most illustrious of such problems are two involving controversial linkings of mints, and one involving a disputed pairing of moneyers. Unfortunately, solutions remain elusive in all three cases. However, the numismatic record is now much richer than before, allowing us to revisit these problems in new perspective. By combining and separating coins included in the Plates, we can seek to make progress in new ways.

## A. Norwich or Northampton

In 1964, F. Elmore Jones published his highly thoughtprovoking paper on the old conundrum of Norwich or Northampton in Short Cross classes I and IV.<sup>1</sup> Now, almost two generations later, it seems a propitious moment to reassess where we are vis a vis this classic riddle.

As will be recalled, Elmore Jones made a strong case against Norwich having been a mint in the 1180s, though he was not quite able to nail down the proof. The issue centred on the two moneyers Reinald and Willelm, all of whose class I coins had traditionally been thought to have mint signatures reading exclusively NOR.<sup>2</sup> Since the five other moneyers were known from coins reading NORh or NORhT, there was no debate over their Northampton mint affiliation, which was obvious.

Elmore Jones essentially demonstrated four things: (1) that there were coins of Willelm in class 'Ia' that read NORA; (2) that there was a coin of Willelm in class Ib that read NORh; (3) that there were coins of Willelm and Reinald in class 'Ib' that shared the same obverse; and (4) that neither moneyer could be die-linked with any of the other five. In short the case was a powerful one, though not entirely airtight, since two sets of moneyers with the names Willelm and Reinald remained at least a possibility.

A third of a century after Elmore Jones set out his findings, that final loophole has unfortunately not yet been closed, though we might usefully re-examine the evidence in the light of new data.

The NORA coins of class Ia1 speak for themselves; sharing the same reverse die, they are obviously of Northampton (Plate 16, 1-2). Similarly, the NORb coin of Ib is of Northampton (3). As concerns the die-linked coins of 'Ib' noted by Elmore Jones, their obverses are what we now call class 1a4 (formerly Ia\*, coins with a seriffed X), with the mint signatures on both reading simply NOR.<sup>3</sup>

Several additional coins reinforce what we already know. First, there is a new die-linking between Reinald and Willelm, classifiable to Ia5 (5-6). Since Ia5 (coins with irregular numbers of curls) is what we formerly called 'early Ib', the linking of these two moneyers has now been extended slightly forward in time. Yet a further coin is a very worn specimen of Willelm in class Ib, which has enough space for a fourth letter (illegible) in the mint signature. And still another coin, of late class Ib, is a Reinald with a mint signature NOD (7). As it seems to me, NOD is a more likely rendering for Northampton than it is for Norwich. In addition, a coin of Reinald of class Ib in the National Museum of Ireland reads NORh explicitly, whereas another of that moneyer (in a private collection) has an 'unreadable' fourth letter. A few other new coins from early in the series (1a4 and 1a5, all reading NOR) have not yet been die linked (eg, 8).

Finally, several points need to be added about the very earliest coins in the class Ia sequence. Whereas the Ial reverse die of the Willelm reads NORA, there is nothing as yet comparable for Reinald, whose own earliest survivor is of class Ia2. As it happens, that coin has a mint signature that reads NOR, with a final pellet instead of (regretably) a final letter (9). At any rate, each of the two moneyers is known so far from but one of the two initial sub-classes in Ia, and, indeed, it is not until Ia4 that they can be explicitly linked, a linking that then continues into la5. I have not yet linked coins of the two moneyers in class Ib proper, though Reinald remained active for far longer (in Ib2 and Ic) than did Willelm (Ib1 only).

<sup>&</sup>lt;sup>1</sup> F. Elmore Jones, 'Norwich or Northampton – A Short Cross Problem', BNJ 33 (1964), 70-2.

<sup>&</sup>lt;sup>2</sup> The belief that they were moneyers of Norwich seems to have originated with John Evans, 'The Short-Cross Question' (1865), 271, and was continued by L.A. Lawrence, 'The Short-Cross Coinage, 1180 to 1247', BNJ 11 (1915), 98. The earlier view tended to favour Northampton; D.H. Haigh, 'On the Short Cross and Long Cross Coinages of Henry III', in R. Sainthill, An Olla Podrida I (1844), p. 134.

<sup>3</sup> Ex Elmore Jones and now in the British Museum. A die duplicate of the Willelm (a coin of 1a4/a3) is included here (4).

In sum, while we continue to fill in pieces of the puzzle of Norwich/Northampton in class I, key parts of the jigsaw are obviously still missing. Nevertheless, the inferences in favour of Northampton exclusively are very strong.

A similar problem regarding N:, NI, NO, NOI, and NOR coins exists in class IV, as elaborated by Elmore Jones in the same paper. Now involving moneyers who are named Randul and Willelm (again), the clinching evidence, as earlier, remains elusive. Though we now have a fairly good sampling of the dies and know that the two moneyers are linked (10-11; 12-13), there are no coins that have a mint signature with a fourth letter. However, another moneyer, Giferei, produced coins in class IVa that read NOR A (14), thereby proving that Northampton was an active mint in class IV. Even so, the current thinking now favours Norwich for Randul and Willelm,4 though the proof for this, I believe, remains not quite airtight. The argument derives essentially from two pieces of evidence - a reference in the Pipe Rolls to a substantial sum of money being given to Norwich to support an exchange during 1195-97,5 and a coin with affinities to class IV of a moneyer Johan, which has a mint signature that is unambiguously NORW.6 Unfortunately, an exchange without an accompanying mint is not without precedent (Nottingham in 1180),7 and the verdict remains out on whether the NORW coin is a genuine issue.8 Moreover, it is hard to see bow Norwich now being open would weaken the case for Northampton remaining open also.9

In sum, the proof that we are looking for in class I would be a die-link between Willelm or Reinald and one of the five other Northampton moneyers, whereas the proof in class IV would be one of two kinds: a die-link between Willelm or Randul and Giferei of Northampton in class IVa, or a die link between Willelm or Randul and Iohan of Norwich in class IV.

#### B. Winchester and Wilton

The arguments regarding Winchester and Wilton are very different from the preceding because we know that both were fully active mints in class I. The original argument that a great fire closed Winchester and led to the opening of Wilton was put forward, in a fascinating paper, by

Brand and Elmore Jones. The matter was subsequently revisited by Allen and myself, with conclusions regarding the circumstances of Wilton's opening rendered somewhat more tentative. <sup>10</sup> What made the subject interesting in the first place was that two of the moneyers at Winchester (Osber and Rodbert) seemingly switched their operations to Wilton, with at least one, Rodbert, using an obverse at Wilton that had been used at Winchester (15–18). <sup>11</sup> At the same time, Rodbert also used a pair of reverse dies whose mint signatures were clearly retooled from WIN to WIL (19–20).

Unsurprisingly, a number of new coins unavailable to Brand and Elmore Jones have appeared since they published, adding up to significantly greater complexity than they had imagined. What now seems apparent is that both moneyers were active at both mints simultaneously and continuously, rather than being at one, then the other, and back again. Among the possibilities that are raised here is that of an Osber who began his operations at Wilton, not Winchester.

It is not actually my purpose here to reopen all of these issues, but rather, simply, to place on the record the new numismatic evidence. If nothing else, this evidence reinforces our notion of simultaneous operations, even as it fails to shed new light on the context in which Wilton was initially opened.

Looking at Osber first, we now have his coins at Winchester in classes Ia3, 1a4/Ia3, Ia4, Ia5, and Ib1 (21–25), and at Wilton in Ia2, Ia4, Ia5, Ib1, Ib1/b2, and Ib2 (26–30). In other words, Osber was seemingly active at Wilton for a longer period in both directions than he was at Winchester, making it difficult for us to think of him as a temporary visitor on assignment from Winchester to Wilton (Elmore Jones' view).

Indeed, a case can be made for an altogether different scenario since 'Osber of Wilton' is known to have owed rent at Winchester for activities during the early 1180s.<sup>13</sup> Of course, a rumoured coin of Osber at Winchester in class Ia1 (1180) would change this picture substantially, revealing him as a moneyer who would then have begun working at Winchester. But the existence of such a piece cannot be confirmed.<sup>14</sup> and either way Osber clearly ended his career at Wilton. Moreover, the possibility of separate Osbers, even if remote, cannot be dismissed

6 See Elmore Jones Sale Catalogue, lot 1794.

7 Brand The English Coinage, p 26.

<sup>9</sup> References to exchange or moneyer activities at Northampton exist for 1192-3 and 1197-8; Brand as in n. 5, p. 54. There appears to be nothing about either Norwich or Northampton from 1198-1204.

<sup>11</sup> It was Elmore Jones who noticed the initial die-linking between the two mints; see Brand and Elmore Jones, 'Emergency Mint of Wilton'; and the Elmore Jones Sale Catalogue, lot 1194.

- 12 The coin of la2 (not pictured) is in the British Museum.
- <sup>13</sup> Sec Allen, as in n. 5, p. 54; and Brand, as in n. 5, p. 55.
- 14 It is not in the corpus of data assembled by Yvonne Harvey on the mint of Winchester.

<sup>&</sup>lt;sup>4</sup> See below. Unaware that that they were die-linked, Lawrence, 'Short Cross Coinage', 98, gave Randul to Northampton and Willelm to Norvich.

<sup>&</sup>lt;sup>5</sup> Or 1194–6; see John D. Brand, *The English Coinage*, 1180–1247; Money, Mints and Exchanges (1994), pp. 33–4, 54; and Martin Allen, 'The Chronology, Mints and Moneyers of the English Coinage, 1180–1247', forthcoming.

<sup>&</sup>lt;sup>8</sup> See Lord Stewartby and M.R. Allen, 'lohan: A Short Cross Class IV Moneyer of Norwich', *N.Circ* (1992), pp. 343–4, for the claim that it is; and Elmore Jones, sale catalogue, for the assumption that it is an imitation. The coin has a highly bizarre appearance, with an obverse that looks like nothing else in the entire Short Cross series, but with a reverse that is very persuasive.

<sup>&</sup>lt;sup>10</sup> J.D. Brand and F. Elmore Jones, 'The Emergency Mint of Wilton in 1180', *BNJ* 35 (1966), 116–19; M.R. Allen, 'The Chronology of Short Cross Class Ia', *BNJ* 63 (1993), 53–8, and J.P. Mass, 'Of Dies, Design Changes, and Square Lettering in the Opening Phase of the Short Cross Comage', *BNJ* 63 (1993).

entirely, for there appears to be no die-linking to connect Osber to both mints. The fact that Osber and Rodbert are themselves die-linked at Wilton (but not at Winchester) in class Ib sheds no light at all on this question.<sup>15</sup>

In the case of Rodbert, we now have his coins at Winchester in classes Ia1, Ial/Ia2, 1a2, 1a4, Ia5, and Ib1 (31, 16, 32–35), and at Wilton in classes Ia1, Ia2/Ia1, Ial/Ia2, Ia2, Ia4, Ia5, and Ib1 (36–37, 15, 38–41). The newest discovery is the 1a4 coin from Winchester (33), which helps us to fill out a picture of a man who, from beginning to end, must have been shuttling back and forth between two places.

On the question, finally, of the opening and closing at Wilton, we can make two statements: that the circumstances surrounding the former are no clearer than before, but that the conditions regarding the latter suggest that Wilton went on to operate as a regular mint. As we now know, its doors, after all, remained opened for several years, with the full sequence of sub-classes represented in both Ia and Ib (thus, Ia1-Ia5, and Ib1 and Ib2).

#### C. Aimer and Fil Aimer

Over the course of a century and more, numismatic scholars have debated, and been confused by, Aimer and Fil Aimer. It is fair to say that every possible relationship between them has now been advanced by someone, as the following range of opinions makes clear: (1) that Aimer and Fil Aimer were one and the same man;<sup>16</sup> (2) that Aimer and Fil Aimer were different and unrelated;<sup>17</sup> (3) that Aimer and Fil Aimer were son and father;<sup>18</sup> and (4) that Fil Aimer on the coins was not Philip Aimery (variously spelt) but rather was a moneyer with a different name.<sup>19</sup>

Though I am unable to provide irrefutable proof here, I now believe theory no. 2 to be correct: that the two men had no connection whatever, apart from being moneyers of London in Short Cross class I. We need to review the principal evidence.

Aimer clearly preceded Fil Aimer on the coins, and was present from the virtual opening of the new series. Thus we now have coins of Aimer in classes Ia1, Ial/Ia2, Ia2, and Ia2/Ia3 (42-45), all of which preceded the earliest of the coins of Fil Aimer. The output by the latter began in class Ia4/Ia3 (46) and continued in 1a4 and Ia5 (47-48), and then ceased. Meanwhile, Aimer had also been issuing in 1a4/1a3, 1a4, and Ia5 (49-51), and he continued to be active into class Ib and beyond.

The conclusions to be drawn here are that we are talking about two moneyers, who, if they were son and father, would have had the normal sequence of 'father first' reversed. They would also have had to be moneyers simultaneously, a situation that would have been highly unusual. Though sons, of course, succeeded their fathers as moneyers with some regularity, they would not normally have overlapped with them into the *next* sub-class. That is, whereas a father and a son might issue in a sub-class that was not yet finished, they were most unlikely to do so also in the one that followed. In the case at hand, the two men clearly produced in classes Ia4 and Ia5.

Moreover, Aimer and Fil Aimer seem never to have shared obverse dies, a practice (die-sharing) that was extremely common at the time. Instead, Aimer shared obverses with a moneyer named Willelm (44, 52), whilst Fil Aimer seems never to have shared dies with anyone Nor is much to be made of the disproportionate outputs of the two men in Ia4 and Ia5. That Fil Aimer was prolific and was even the dominant moneyer of that brief era tells us nothing about his relationship with Aimer, who was merely steady. As already noted, our attention is accordingly drawn to the single item that they actually shared in common. Without the word 'Aimer' as it appears in its two contexts, there would be little reason for any exploration into the current subject.

The physical whereabouts of the two men is germane here. If Aimer, as most scholars now believe, was the son of Fil Aimer, he would have had to have travelled from Tours to London in advance of his father, and to have adopted a surname for his name on the coins, a practice without a clear precedent or rationale at the time. Moreover, the son would have had to survive the scandal that later enveloped the father, since Fil Aimer was sent back to France in disgrace in early 1181, with Aimer remaining as a moneyer for some years thereafter (see below). Once again, the inferences seem to point to unrelatedness.

However, the matter is confused by a reference in the Pipe Rolls to an 'Aimer fitz Philip', i.e., 'Aimer the son of Philip.' <sup>20</sup> But the meaning here is anything but clear since the father referred to might *not* have been Filip Aimery but another Filip. To argue to the contrary is of course possible; but it would oblige us to overlook the *entirety* of the numismatic evidence.

In my opinion, the joint usage of the names is a coincidence that has created an imaginary link. In other words, Aimer by itself is a given name; but Aimer in Fil Aimer is an oddly shortened surname (see below). Thus a coin of Aimer in class 1a2 could be misspelt as 'GIMGR', a typical example of the confusion regarding the rendering of moneyers' given names at this early juncture.<sup>21</sup> Similarly, a

<sup>&</sup>lt;sup>15</sup> See the reference to this die-linking in the Elmore Jones Sale Catalogue, lot 1201.

<sup>&</sup>lt;sup>16</sup> See, e.g., W.S.W. Vaux, 'Some Notes on the Eccles Find of Silver Coins', NC (1865), 219–54; R.L. Kenyon, 'The Short Cross Question', NC (1875), 145; and T.W. Armitage, 'Correspondence: The "Short Cross" Question', N.Circ 30 (1922), columns 398–9.

<sup>&</sup>lt;sup>17</sup> See, e.g., J. Evans, 'Further Remarks on the Short Cross Question', NC (1875), 153-4. Lawrence made the definitive statement on behalf of this point of view: 'I do not know who Aimer was or his relationship if any to Philip Amery,' See L.A. Lawrence, 'Correspondence: The "Short Cross" Question', N.Circ 30 (1922), columns 509-10.

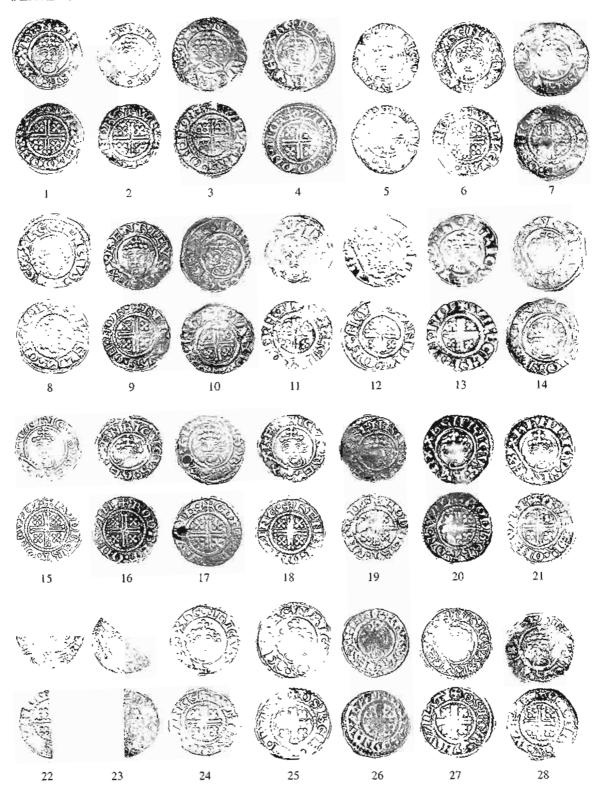
<sup>&</sup>lt;sup>18</sup> E.g., D.F. Allen, A Catalogue of English Coins in the British Museum: The Cross-and-Crosslets (Tealby) Type of Henry II (1951), p. cxlviii; J.D. Brand, 'Filip Aimer - Exchanger and Moneyer', N.Circ 81 (1973), 371-2; and Allen, as in n. 10, p. 55.

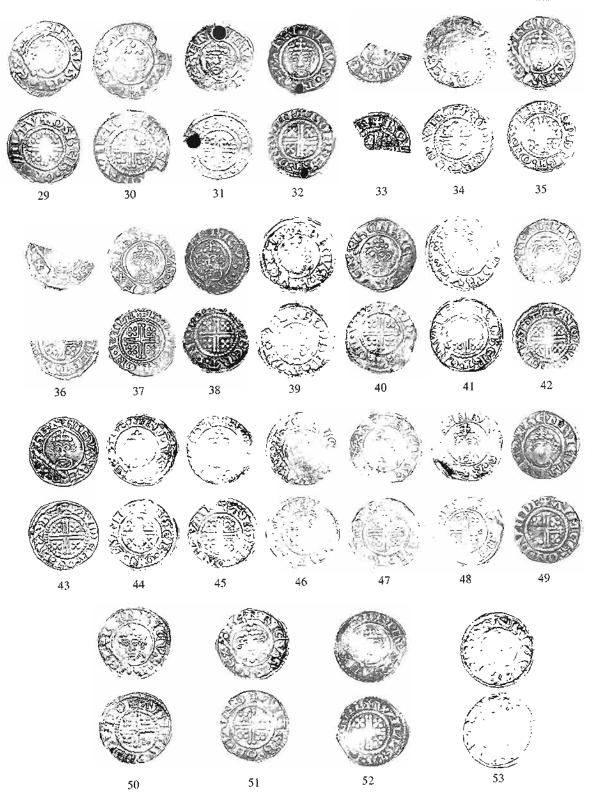
<sup>&</sup>lt;sup>19</sup> E.g., Evans, as in n. 2, p. 279, proposed this as at least a possibility.

<sup>&</sup>lt;sup>20</sup> Cited by Brand, as in n. 5, pp. 28-9; and Allen, as in n. 10, p. 55.

<sup>&</sup>lt;sup>21</sup> The coin itself is in the Rotenfels Hoard; see G.P. Gittoes and N.J. Mayhew, 'Short Cross Sterlings from the Rotenfels Hoard', BNJ 53 (1983). For the subject of variant spellings, see Mass, as in n. 10.

# PLATE 16





MASS: SHORT CROSS PROBLEMS (2)

coin of Aimer in class II was spelt halmar, after a multiyear lapse in his minting activity in classes Ib2 and Ic (53). But Aimer himself, as far we can determine, was an altogether typical moneyer, made atypical only in hindsight by students who felt the need to decode the mysteries surrounding Fil Aimer.

As just stated, the real problems lie with 'Fil Aimer', whose names and persona are intermixed in ways we are still unable to interpret. In the absence of any reasonable alternative, our starting point must be simply that 'Fil Aimer' is a shortened version of 'Philip Aimery'. However, by making such a point, we are acknowledging a rendering on the coins that is unique For nowhere else do we encounter the seeming abbreviation of each of a moneyer's two names. In all other cases, the most that appears is the full given name plus the first letter (or first two letters) of the surname. Thus, Pieres M and Henri Pi would be typical examples, necessitated by the prior existence of another Pieres and Henri. But the point is that Henri Pi is never rendered on the coins as, say, 'Hen Pine' (for Henri Pineferding), which would have been the functional equivalent of 'Fil Aimer'. Moreover, we are unable to explain why Philip Aimery's name was not simply recorded on the coins as 'Filip', which would have been not only simpler but also entirely in line with regular practice.22 At this time, there were no other Filips of London to confuse things, with the single active moneyer named Filip a man of Northampton.

And thus 'Fil Ajmer', the most famous name(s) on the coins, continues to resist our best efforts to understand him. We are obliged to ponder (and ultimately to reject) several other interpretations. For example, it is difficult to

credit 'Fil Aimer' as not the father but rather the son, even though his coins clearly came second. Similarly, it seems altogether untenable that 'Fil Aimer' could have been a temporary amplification of 'Aimer' on the coins, coming during that moneyer's prolific period in classes Ia4 and Ia5. For even if an unprecedented usage was being claimed by him when he was, inarguably, the dominant moneyer, Philip Aimery stopped issuing coins soon thereafter, and was dismissed from service a few months after that.<sup>23</sup> In other words, we have here an insoluble problem: for if all along there was only one moneyer who now came to be dismissed, who was the Aimer who continued into classes Ib, II, III, and IV?

Indeed, the fact that it is no longer possible to retain Fil Aimer as a moneyer in class lb serves the useful purpose of separating him from Aimer both before and after. By repositioning, as we have, the traditional opening phase of class Ib to the closing phase of class Ia,<sup>24</sup> we are establishing, in effect, a new criterion by which to attribute the names on the coins to two moneyers. To repeat, then, Aimer and Fil Aimer seem not to have been related, with the former a normal moneyer in every way, but with the latter still an enigma despite our best efforts.

Finally, the coins themselves of Fil Aimer are unfortunately no help here, since, with the tiny exception of a variable pellet separating his two names, his coins all read exactly the same way. Thus, 'Fil Aimer' is always FIL[.] AIMER.ONLVN on the coins, a rigidly unchanging pattern that was highly unusual. In the end we are left with but a single recourse – to leave Fil Aimer shrouded in mystery, but to rescue his unlucky namesake from a shadow not in any way of his own making.<sup>25</sup>

# MINT OUTPUT IN THE ENGLISH RECOINAGE OF $1247-1250^{1}$

#### MARTIN ALLEN

In the 1930s W.C. Wells published some important documentary evidence for mint output during the Long Cross recoinage of 1247–50.<sup>2</sup> On 28 July 1250 sheriffs were ordered to recover the costs of the die-keepers' fees from the moneyers of ten of the recently closed recoinage mints: Exeter (£8 15s. 3d.), Gloucester (£11), Lincoln (£18), Newcastle-upon-Tyne (£6 12s.), Northampton (£14), Norwich (£12), Oxford (£14), Wilton (£4 13s. 9d.), Winchester (£12 7s. 11d.) and York (£10 l0s.). Wells suggested that these sums were payments for the entire

recoinage outputs of the mints, and he calculated the outputs, assuming that the die-keepers were paid 1s. per £100 minted. Wells preferred a second series of calculated outputs, double the size of the first set, using a 6d. per £100 rate. When Christopher Blunt and John Brand published the London and Canterbury mint outputs of the reign of Henry III (1216–72), they noted that the die-keepers were paid 6d. in one period. However, there is documentary evidence for the payment of 1s. per 100 pounds of silver minted in the recoinage. The outputs calculated by Wells

- 22 Brand, The English Coinage, as in n. 5.
- <sup>23</sup> See Brand, as in n. 5, p. 30, for the dismissal. According to Martin Allen, there is evidence to show that Fil Aimer ceased to be a moneyer in autumn 1180, just as the transition to class lb was about to occur.
  - That is, the old 'early Ib' is now relabeled 'Ia5'; Mass, as in n. 10.
- <sup>25</sup> The author wishes to thank Martin Allen, Lord Stewartby, and Peter Woodhead for reading and commenting on this paper. Nos 26, 31 and 43 in the Plates are in the collections of the British Museum, Lord Stewartby and Mr Woodhead, respectively; the remainder are in the collection of the author.
- <sup>1</sup> Acknowlegements. Dr Mark Blackburn has read a draft of this note, providing many helpful comments. Dr Barrie Cook has supplied invaluable hoard data (see note 8).
  - <sup>2</sup> W.C. Wells, 'Notes on the Long-Cross coinage of Henry III, 1247–1250', BNJ 22 (1934–7), 79–107, at pp. 93–7.
  - C.E. Blunt and J.D. Brand, 'Mint output of Henry III', BNJ 39 (1970), 61-6, at p. 62.
- <sup>4</sup> The payment of 1s per 100 lb, in the recoinage is specified in the Officia ministrorum cambit (Red Book of the Exchequer, fol. 246), edited by C. Johnson, The De Moneta of Nicholas Oresme and other Mint Documents (London, 1956), pp. xxvi, 52.

from a 1s. rate must be slightly increased to take account of the production of 242d. instead of 240d. from each pound of silver, inferred from mint accounts. The total of the adjusted calculations for ten mints in Table 1 is £225,756, which is consistent with Marion Archibald's two alternative estimates for all of the seventeen 'provincial' mints (£265,357 and £287,470).

Archibald calculated her estimates of the output of the provincial mints from the combined London and Canterbury outputs, in proportion to the numbers of coins of the first three Long Cross classes in six hoards: Palmer's Green (1911), Steppingley (1912), Slype (1914), Hornchurch (1938), Coventry (1958) and Coichester (1969)<sup>7</sup> The lower estimate assumed that London and Canterbury produced fifty-two per cent of the coins of classes I–III in 1247–50, based upon the aggregate per-

centage in the hoards (fifty two point three per cent). The higher estimate assumed fifty per cent, allowing for possible bias towards London and Canterbury in the Coichester hoard, which dominates the aggregates. Four hoards have been recorded since the publication of Archibald's calculations: Greywell (1988 and 1993), Welwyn Garden City (1992), Sporle with Palgrave (1995-8) and Thwaite (1998).8 These new hoards contained a total of 83 Long Cross coins of classes IIII attributable to a mint.9 The Colehester hoard had 5832 relevant coins, and the other hoards had a total of 1437. In Table 1 aggregate numbers of coins in the hoards are compared with the outputs calculated from the die-keepers' fees. This table also includes the Shrewsbury output, calculated from the roll of assays published by R.L. Kenyon and J.D. Brand, and the London and Canterbury outputs of November 1247-July 1250.10

TABLE 1. Mint outputs and hoard coins, 1247-50

Mint	Output	Output from fees	Coins in hoards	Output per hoard coin
Canterbury	£100,355		1247	c.£80
Exeter		£17,671	200	c.£88
Gloucester		£22,183	271	c.£82
Lincoln		£36,300	424	c.£86
London	£189,511		2591	c.£73
Newcastle	102-4235 201 \$1-000 14	£13,310	167	c.£80
Northampton		£28,233	359	c.£79
Norwich		£24,200	314	c.£77
Oxford		£28,233	286	c.£99
Shrewsbury	£7,227		74	c.£98
Wilton		£9,453	109	c.£87
Winchester		£24,998	306	c.£82
York (Royal)11		£21.175	278	c.£76
Total	£297,093	£225,756		

6 M.M. Archibald, 'Wastage from currency: Long-Cross and the recoinage of 1279', in N.J. Mayhew (ed.), Edwardian Monetary Affairs (1279-1344): A Symposium held in Oxford, August 1976 (BAR 36, Oxford, 1977), pp. 167-86, at pp. 168-72, 174.

<sup>&</sup>lt;sup>5</sup> Blunt and Brand, as in n. 3, pp. 62-3. CE. Challis (ed.), A New History of the Royal Mint (Cambridge, 1992), p. 673.

<sup>&</sup>lt;sup>7</sup> H.A. Grueber, 'Palmer's Green hoard', NC 4th ser. 12 (1912), 70–97. L.A. Lawrence, 'The Steppingley find of English coins', NC 4th ser. 14 (1914), 60–76. G.C. Brooke, 'A find of Long-Cross pennies at Slype (West Flanders)', NC 4th ser. 14 (1914), 256–9. D. Allen, 'Treasure trove, 1933–9. 2. Hornchurch, Essex, 1938', BNJ 23 (1938–40), 274–9. R.H.M. Dolley, 'The 1958 Coventry treasure trove of Long Cross pence of Henry III', NC 6th ser. 18 (1958), 109–22. 'The 1969 Colchester hoard: Editorial note', BNJ 44 (1974), 39–40.

<sup>8</sup> I am grateful to Dr Barrie Cook for his provision of data from these hoards and the Colchester hoard in advance of publication.

The Greywell hoard had three coins not attributed to a mint, and the Welwyn Garden City hoard had two.

<sup>&</sup>lt;sup>10</sup> R.L. Kenyon, 'The Shrewsbury mint and its officers under Henry III', NC 3rd ser. 19 (1899), 112–24, at pp. 115, 117–18. J.D. Brand, 'The Shrewsbury mint, 1249–1250', in R.A.G. Carson (ed.), Mints. Dies and Currency: Essays Dedicated to the Memory of Albert Baldwin (London, 1971), pp. 129–50, at pp. 132–3. Challis, as in n. 5, p. 674. Challis adjusted the London and Canterbury outputs published by Blunt and Brand, 'Mint output of Henry III', to take account of the assumed production of 242 pence from each pound of silver. I have applied a similar adjustment to the Shrewsbury output published by Kenyon and Brand (£7,167).

The York royal mint hoard totals are for the four king's moneyers named in the list (BM Hargrave MS 313, p. 97) most recently published by Johnson, *The De Moneta*, pp. 100–6, at p. 103. The fifth moneyer, Tomas, must have been the archbishop's moneyer, as suggested by L.A. Lawrence, 'The two mints at York', *NC* 5th ser. 5 (1925), 366–79, at pp. 367–8. 1. Dowthwaite, 'Long Cross moneyers of York', *YN3* (1997), 73–83, at p. 77 has noted that the coins of the four king's moneyers begin in Lawrence class II (Davis class IIIb), and the earliest coins of Tomas belong to class IIIb, which is consistent with the later start of the archbishop's mint inferred from documentary evidence.

The general similarity of the outputs per hoard coin encourages confidence in the output figures based upon die-keepers' fees. Five of the ten fees are pounds without shillings or pence, which may indicate approximation, but the fees seem to be reasonably accurate indicators of output. Two of the mints have outputs per hoard coin noticeably higher than the rest: one of the mints with a fee expressed in pounds only (Oxford), and the mint with the smallest number of coins and relatively unreliable statis-

tics in consequence (Shrewsbury). The lowest output per coin is for London, which may confirm Archibald's suspicion of a bias towards London in the Colchester hoard. It is also possible that London production of class III continued after the end of the London and Canterbury mint output periods in July 1250. The mean of the outputs per coin is about £84. This figure can be multiplied by the numbers of hoard coins to produce tentative estimates of the undocumented outputs, listed in Table 2.

TABLE 2. Estimated mint outputs, 1247-50

Mint	Coins in hoards	Estimated output
Bristol	148	c.£12,000
Bury St Edmunds	197	c.£17,000
Carlisle	54	c.£5,000
Hereford	83	c.£7,000
Ilchester	55	c.£5,000
Wallingford	54	c.£5,000
York (Archiepiscopal)	135	c.£11,000
Total		c.£62,000

The combined total of the provincial mint outputs in Tables 1 and 2 is c. £295,000, and the total for all mints is c. £585,000. Archibald estimated that the output of the recoinage was between £552,827 and £574,940, but she had to use London and Canterbury output figures without the increases required by the production of more than 240d, from each pound of silver, 12 If Archibald's estimates are adjusted for the minting of 242d, per pound, they increase to £557,434 and £579,731, bringing the higher estimate closer to my estimate (c. £585,000). Nicholas Mayhew has calculated that about £400,000 in Short Cross coins was available for recoinage, deducting £150,000 from Archibald's original lower estimate. Mayhew assumed that the normal output of the English mints from supplies of silver unconnected with recoinage was about £50,000 per year, and deducted three years of

normal output at this rate. The London and Canterbury outputs in Table 3 support an assumption that normal annual output in the period of the recoinage was c. £50,000-£60,000. The table does not include the provincial mints, but London and Canterbury had a nearmonopoly of mint output immediately before and after the recoinage.14 Mayhew's estimation of the volume of the English coinage recoined can be refined by deducting two years and eight months of normal output at £50,000 and £60,000 per year from my estimate of the output of November 1247–July 1250 (c. £585,000), with c. £425,000– £450,000 as the result.15 This is based upon a series of assumptions and approximations, but it can be stated with some confidence that the total value of the English silver currency in 1247, including a small percentage of foreign coins, was nearly half a million pounds. 16

<sup>12</sup> Archibald, as in n. 6, p. 172.

<sup>&</sup>lt;sup>13</sup> N.J. Mayhew, 'Money and prices in England from Henry IJ to Edward III', Agricultural History Review 35 (1987), 321-32, at p. 125.

<sup>&</sup>lt;sup>14</sup> Lord Stewartby, 'The "Naxos" hoard of thirteenth-century sterlings', *NC* 154 (1994), 147–66, recorded 263 coins of Short Cross class VIII attributable to a mint, including 247 (93.9%) from London or Canterbury. Archibald, 'Wastage from currency', p. 174 found that the London and Canterbury mints supplied between 94.7% and 98.0% of the post-recoinage Long Cross coins in the six hoards analysed

Mayhew, as in n. 13, p. 125 suggested that more than £400,000 in Short Cross coins may have been needed to produce that amount of new coinage, due to loss of weight in circulation. F. Dumas and J.D. Brand, 'The British coins in the Gisors (1970) hoard', BNJ 40 (1971), 22–43, at p. 30 found that the mean weight of the English pence in this hoard deposited in the mid 1240s was 1.38 g or 21.3 gr., no more than about 5% below standard weight.

<sup>&</sup>lt;sup>16</sup> H.A. Grueber, 'A find of silver coins at Colchester', NC 4th ser. 3 (1903), 111–76 recorded 351 Irish, Scottish and Continental coins in a hoard of 10,926 coins and fragments, constituting only 3.2 per cent of the total. This hoard was deposited in 1237, a decade before the recoinage of 1247–1250, but it may provide some indication of the contribution of foreign silver coins to English money supply at the time of the recoinage, B.J. Cook, 'The bezant in Angevin England', NC 159 (1999), 255–75 discusses the use of foreign gold coins in England between 1154 and 1259.

TABLE 3. London and Canterbury mint outputs, 1244-56

Period	London	Canterbury	Total output	Output per year
Feb. 1244-Feb. 1245	£29,497	£19,025	£48,522	c. £49,000
Feb. 1245-Apr. 1246	£24,920	£28,600	£53,520	c. £49,000
Apr. 1246- Nov. 1247	£38,985	£28,200	£67,185	c. £47,000
Nov. 1247-Nov. 1248	£73,013	£40,258	£113,271	c. £113,000
Nov. 1248–Nov. 1249	£80,559	£41,703	£122,262	c. £122,000
Nov. 1249-July 1250	£35,939	£18,394	£54,333	c. £81,000
July 1250– May 1252	£69,569	£37,519	£107,088	c. £58,000
May 1252-Nov. 1254	£84,526	£90,159	£174,685	c. £70,000
Nov. 1254–July 1256	£51,689	£66,408	£118,097	c. £71,000

Source: C.E. Challis, A New History of the Royal Mint, p. 674.

# DOCUMENTARY EVIDENCE FOR THE OUTPUT, PROFITS AND EXPENDITURE OF THE BURY ST EDMUNDS MINT<sup>1</sup>

#### MARTIN ALLEN

THE surviving registers and cartularies of the abbey of Bury St Edmunds form the largest collection of such documents from an English monastery.<sup>2</sup> The 'Kempe' register (British Library Harley MS 645), compiled from various sources in the fourteenth and fifteenth centuries,<sup>3</sup> is a particularly rich source of documentary evidence relating to the Bury St Edmunds mint. It was extensively cited by Ruding, and the Fox brothers published transcripts, but it has never been published in its entirety.<sup>4</sup> Two mint accounts in the Kempe register, which may be the only surviving accounts of the Bury St Edmunds mint, have not been mentioned in a numismatic publication until now.<sup>5</sup> The Latin text of the second account is transcribed in an appendix of this article, as it is particularly important. It

records transactions with customers, showing that the royal mint system of charging was not universal in thirteenth-century English mints. An ecclesiastical mint could charge less than the king's mints, calculating the seignorage in a previously unsuspected way.

The first account is for the period from 11 April 1256 to 19 April 1258, rendered on 17 May 1258.<sup>6</sup> The sacrist (who supervised the mint), the sub-sacrist and the moneyer, Randulf le Blund, accounted for a profit of £47 9s. The sacrist had also received an extra profit of unspecified size, at the rate of 2d, from each pound of silver minted (ijd. de qualibet libra quos percepit de monetario), demonstrating that the Bury St Edmunds mint was striking 242d, per pound, in accordance with the practice of

- <sup>1</sup> Acknowledgements: I have greatly benefitted from the help and advice of Dr Antonia Gransden, whose knowledge of Bury St Edmunds documentary evidence is unrivalled. Dr Mark Blackburn, Mr Nicholas Mayhew and the Rt. Hon. Lord Stewartby have read drafts of this note and offered many useful comments. The staff of the Manuscripts Reading Room at the British Library have been unfailingly helpful.
- <sup>2</sup> The Archives of the Abbey of Bury St Edmunds, edited by R.M. Thomson (Suffolk Records Society 21, 1980), p. 5. The Bury St Edmunds registers are listed and described by Thomson, pp. 119-62; W. Dugdale, Monasticon Anglicanum, edited by J. Caley, H. Ellis and B. Bandinal (6 vols, London, 1817-30), iii, 117-31; The Victoria History of the County of Suffolk, edited by W. Page (2 vols, London, 1907-11), ii, 56-7 note 2.
  - <sup>3</sup> Thomson, as in n. 2, pp. 127–9 analyses the contents and history of the Kempe register (no. 12).
- <sup>4</sup> R. Ruding, Annals of the Coinage of Great Britain and its Dependencies from the Earliest Period of Authentic History to the Reign of Victoria (3rd edn., 3 vols, London, 1840), i, 38–9, 206, ii, 218–20; H.B.E. Fox and S. Fox, 'Numismatic history of the reigns of Edward I, II, and III [part 2]', BNJ 7 (1910), 91–142, at pp. 138–9; idem, 'Numismatic history of the reigns of Edward I, II, and III [part 3]' BNJ 8 (1911), 137–48, at p. 147.
- <sup>5</sup> P.D.A. Harvey, 'Mid-13th-century accounts from Bury St Edmunds Abbey', in Bury St Edmunds: Medieval Art, Architecture, Archaeology and Economy, edited by A. Gransden (British Archaeological Association Conference Transactions 20, 1998), pp. 128–38, at p. 137 lists two mint accounts in the Kempe register; an account of 29 January–20 December 1250, and one of 1256–8. The text of 1250 (BL Harley MS 645, fol. 260v.) only states that the moneyer received nothing from the sacrist during the period of account. The account of 1256-8 and another account discussed in this article will receive further discussion in the revised and extended publication of Dr R.J. Eaglen's Ph.D. thesis, 'The Mint of Bury St Edmunds to 1279' (University of London, 1989).
- <sup>6</sup> BL Harley MS 645, fol. 261v. Eaglen, as in n. 5, pp. 274–6 argues that the mint was closed in the vacancy between the death of Abbot Edmund de Walpole on 31 December 1256 and the restoration of temporalities to the new abbot, Simon de Luton, on 12 January 1258. The payment of the moneyer's annual fee for two years, recorded in the account, seems to indicate that the mint remained open *The Letter-Book of William of Hoo Sacrist of Bury St Edmunds 1280–1294*, edited by A. Gransden (Suffolk Records Society 5, 1963), p. 10 discusses a division of property and rights between the abbot and convent in 1281 (Dugdale, *Monasticon Anglicanum*, ii., 156–8; *Calendar of Charter Rolls 1257–1300*, p. 259), which acknowledged the right of the prior and convent to operate the mint in a vacancy.

the London and Canterbury mints.<sup>7</sup> The moneyer received a fee of £10 for two years' service in the mint, at 100s, per annum, robes costing £3, and presents or gratuities worth 4s. 8d.<sup>8</sup> The die-keepers were paid 18s. Church offerings at Christmas and Easter, given to priests by mint personnel and claimed as expenses, cost 9s. 5½d. The servants of the mint received customary payments totalling 2s. on Hock Day (the second Tuesday after Easter), and 3s. on the morrow of the Feast of Relics (the Monday after the fourth Sunday in October).

The second account is a moneyer's account from the period of office of John de Burnedisse (Burnedys), the Bury St Edmunds moneyer from 1265 to 1278.9 This account supplies information about amounts of silver purchased, profits and expenses in part of an unspecified year between 1268 and 1276.10 It begins with a list of fifteen purchases of silver, specifying the supplier, the weight purchased (equating 1 lb with £1), the amount paid in new coins, and the seignorage charges per pound weight.11

TABLE 1. Purchases of silver

Date	Supplier	Weight	Paid	Charge
12 March	John de Burnedys	£14 7s. 0d.	£14 0s. 0d.	6d.
25 March	William de Swafham	£21 4s. 2d.	£20 0s. 0d.	14d.
Easter	William de Swafham	£42 5s. 6d.	£40 0s. 0d.	13 <i>d</i> .
No date	Prior of the abbey	£6 11s. 8d.	£6 11s. 8d.	nil
No date	Treasurer of the abbey	£2 7s. 3d.	£2 4s. 8d.	12d.
8 July	Henry de Coloyne	£85 0s. 0d.	£82 17s. 6d.	6d.
8 July	Henry de Coloyne	£82 6s. 8d.	£80 5s. 6d.	6d.
8 July	Henry de Wypelford	£23 16s. 8d.	£23 5s. 2d.	6d,
8 July	Henry de Wypelford	£1 12s, 2d.	£1 10s. Qd.	6d.
8 July	Henry de Wypelford	16s. 1d.	15s. 7d.	6d.
8 July	Aylbrith de Bruneswyk	£65 15s. 0d.	£64 2s. 1d.	6d.
No date (8 July?)	Aylbrith de Bruneswyk	£30 18s. 0d.	£29 7s. 3d.	12d.
No date (8 July?)	Aylbrith de Bruneswyk	£1 16s, 6d,	£1 15s. 7d.	6d.
23 July	Henry de Colon'	£5 2s. 6d.	£5 0s. 0d.	6d.
No date	John de Burnedys	£31 Os. 0d.	£30 5s. 0d.	6d.

The intervals between the dates of purchase indicate that exchanging, and probably minting, were episodic. The two parcels of silver in the name of John de Burnedisse may have been accumulations of bullion from various sources, received at various times. John de Burnedisse's second consignment was an 'assay' of thirty-one pounds, which was a standardised amount used for accounting purposes. <sup>12</sup> On two or three occasions a mint customer was credited with more than one parcel of silver of the same fineness on the same day, indicating different kinds

of silver (coin or bullion), or some other reason for separate transactions. The owners of silver included two apparently local men, with names probably referring to places in Cambridgeshire (Whittlesford), and Cambridgeshire or Norfolk (Swaffham). Henry of Whittlesford (Wypelford) received 70s. as the rent of two mills, a share in a gift of wine, and expenses incurred in Canterbury with four other merchants. Albrecht of Brunswick (Aylbrith de Bruneswyk) and Henry of Cologne (Cologne or Colon') seem to have been German merchants, proba-

<sup>&</sup>lt;sup>7</sup> C.E. Blunt and J.D. Brand, 'Mint output of Henry III', BNJ 39 (1970), 61–6, at pp. 62–3; A New History of the Royal Mint, edited by C.E. Challis (Cambridge, 1992), pp. 133, 673.

<sup>&</sup>lt;sup>8</sup> N.J. Mayhew, 'From regional to central minting, 1158–1464', in *A New History of the Royal Mint*, pp. 83–178, at pp. 117–19 discusses the reform of the royal mints in 1262, which introduced salaries for the moneyers, who had formerly received the residue of the minting charges after the payment of costs and the king's seignorage.

<sup>&</sup>lt;sup>9</sup> BL Harley MS 645, fol. 219. John de Burnedisse was presented at the exchequer as the Bury St Edmunds moneyer on 29 January 1265 (PRO E368/39, rot. 6d.; Fox and Fox, 'Numismatic history of the reigns of Edward I, II, and III (part 2]', pp. 94, 129). His successor, Joceus de Kyrketone, goldsmith of Bury St Edmunds, was presented in the exchequer Easter term of 1278 (BL Harley MS 645, fol. 123v.; PRO E368/51, rot Sd.; Fox and Fox, 'Numismatic history of the reigns of Edward I, II, and III (part 2]', pp. 95, 129).

<sup>&</sup>lt;sup>10</sup> The account includes a payment to the die-keepers, John de Sculdham and William de Scrub. William de Scrub was presented at the exchequer in the Michaelmas term of 1267 (PRO E368/42, rot. 2d.), and the dates in the account, which are before Michaelmas (29 September), must refer to 1268 or a later year. The latest possible year for the account is indicated by the presentation of Joceus (de Kyrketone) the Goldsmith as die-keeper in the Michaelmas term of 1276 (PRO E368/50, rot. 1d.).

Maybew, 'From regional to central minting', pp. 124-6, 153-5 discusses the operation of rolls of purchase in the royal mints, which have the same basic form as the record of John de Burnedisse's purchases.

<sup>&</sup>lt;sup>12</sup> Dugdale, Monasticon Anglicanian, iii, 164 provides the text of an early-thirteenth century enquiry into the management of the Bury St Edmunds mint, which states that the assayer receives 1d. for assaying an 'assay' of about thirty-one pounds (Si in xxxy libris facit assay. In minori et majori.), J.D. Brand, 'The Shrewsbury mint, 1249–1250', in Mints, Dies and Currency, Essays Dedicated to the Memory of Albert Baldwin, edited by R.A.G. Carson (London, 1971), pp. 129–50, at p. 131 discusses the use of thirty-one pound assays in the records of the Shrewsbury mint.

bly importing silver to buy wool for export. 13 The prior was not charged for minting, but the treasurer of the abbey had to pay. The reason for this distinction is not apparent, and the treasurer received the net profit of the account (£8)  $12s. 8\frac{3}{3}d.$ ). Ten of the charges are the customary English seignorage of 6d, per pound charged for silver of standard fineness until 1279. The higher charges (12d., 13d. and 14d.) imply that baser silver was being purchased. In the royal mints the seignorage was deducted from the amount of silver purchased, but in Bury St Edmunds it was added to the prices paid. For example, in the purchase of 12 March, 7s. was added to the £14 paid, at 6d. per pound, to equal the weight purchased (£14.7s.). In a royal mint, 7s. 2d. would have been deducted from £14 7s., leaving £13 19s. 10d. Royal mints also charged 6d. per pound for the moneyers' mintage, substituting six pennyweights of copper for an equal weight of silver. John de Burnedisse's calculations do not provide any indication of the deduction of 6d. mintage, and the evidence of the moneyer's fee in the account of 1256-8 suggests that he received an annual fee paid from the 6d. seignorage. The addition of 6d, per pound to the purchase price provides an estimate of the amount of silver purchased at standard fineness, when the charges indicate that baser silver was received. The value of the coins minted, by tale, can be estimated from the actual or calculated weights of standard silver purchased, at 242d, per pound.

The total of the weights in Table 2 is £412 5s. 9d., and the total of coins minted is £415 14s. 1d. These totals are no more than estimates: the actual amounts would have

depended upon various unquantifiable factors, including the accuracy of measurement of weights and fineness, and the efficiency of the minting operations. The gross profit in the account, including 3s. 6d. allowed for the minting of the prior's silver without charge, is £10 4s. 6d. This is equivalent to 6d, seignorage on £419 4s, 6d, by weight or £422 14s. 4d. by tale, calculated according to John de Burnedisse's method. These figures are about 1.4 per cent higher than the totals calculated from Table 2, which may indicate hidden discrepancies in the accounts. 15 It can at least be stated that in a period of approximately five months the Bury St Edmunds mint received silver sufficient to mint about £420. John de Burnedisse's two diekeepers shared a payment of 4s. for the minting of 400 pounds of silver. The payment of 1s. per 100 pounds was customary in English mints, 16 and in Bury St Edmunds this rule was evidently strictly interpreted, excluding payment for parts of 100 pounds. The 18s, paid as die-keepers' fees in the account of 1256-8 implies payment on 1,800 pounds of silver, although the £47 9s, profit indicates the minting of 1,898 pounds by royal mint computation or about 1,945 pounds according to John de Burnedisse's method. The two alternative outputs of 1256-8 calculated from the profit are equivalent to about £1,914 and £1,962 by tale, or about £1,000 per annum. The silver receipts in John de Burnedisse's account would be equivalent to an output of about £1,000 in a full year, if it is assumed that the same rate of production was maintained throughout the year, but there may have been seasonal variation in output. The £3 per annum valuation of the mint in a 1268

TABLE 2. Silver purchased and minted

Paid	Weight	Calculated weight	Minted
£14 Os. 0d.	£14 7s. 0d.		£14 9s. 5d.
£20 Os. 0d.		£20 10s. 0d.	£20 13s. 5d.
£40 Os. 0d.		£41 Os. Od.	£41 6s. 10d.
£6 11s. 8d.	£6 15s. 0d.		£6 16s. 1d.
£2 4s. 8d.		£2 5s. 9d.	£2 6s. 2d.
£82 17s. 6d.	£85 0s. 0d.		£85 14s. 2d.
£80 5s. 6d.	£82 6s. 8d.		£83 0s. 5d.
£23 5s. 2d.	£23 16s. 8d.		£24 0s. 8d.
£1 10s. 0d.	£1 12s. 2d.		£1 12s. 5d.
15s. 7d.	16s. 1d.		16s. 3d.
£64 2s. 1d.	£65 15s. 0d.		£66 6s. 0d.
£29 7s.7d.		£30 15s. 11d.	£30 6s.11d.
£1 15s.7d,	£1 16s. 6d.		£1 16s. 10d.
£5 0s. 0d.	£5 2s. 6d.		£5 3s. 4d.
£30 5s. 0d.	£31 Os. Od.		£31 5s. 2d.

<sup>&</sup>lt;sup>13</sup> J.P. Huffman, Family, Commerce, and Religion in London and Cologne. Anglo-German Emigrants, c. 1000-c. 1300 (Cambridge, 1998), pp. 173-4 discusses court cases in Great Yarmouth in the 1280s, which provide evidence of Henry of Cologne's commercial transactions in Norfolk. E.M. Carus-Wilson and O. Coleman, England's Export Trade 1275-1547 (Oxford, 1963), p. 36 summarise the earliest recorded wool exports of the customs ports, from 1279. Exports of 23.957 sacks of wool in 1279-80 included 521 sacks from Ipswich and 1,044 sacks from Lynn.

<sup>&</sup>lt;sup>14</sup> In the recoinage of 1247–50, 10d. was temporarily added to the customary 6d. seignorage, according to the Officia ministrorum cambii (Red Book of the Exchequer, fol. 246), edited by C. Johnson, The De Moneta of Nicholas Oresme and other Mint Documents (London, 1956), pp. 51–2, Mayhew, as in n. 8, p. 134 tabulates minting charges from 1278 to 1464, showing the divergence from the 6d. seignorage in 1279.

<sup>15</sup> Eleven of the purchases in Table 1 have an error in calculation. If weights of silver purchased are calculated from the amounts paid and the charges, the errors range from 1d, or 0.01 per cent in the last entry in the table to 1s, 5d, or 4.4 per cent in the purchase of £1 12s, 2d, from Henry de Wypelford. The other errors vary between 0.02 and 0.7 per cent.

<sup>&</sup>lt;sup>16</sup> Dugdale, Monasticon Anglicanum, iii, 164; The De Moneta of Nicholas Oresme and other Mint Documents, pp. xxvi, 52; Blunt and Brand, as in n. 7, p. 62.

list of the sacrist's revenues,<sup>17</sup> equivalent to an output of £120 or £123 by weight and £121 or £124 0s. 6d. by tale, implies either a substantially reduced output or a considerable under-valuation of the mint's profits. In 1319 a pyx trial of the coins minted in Bury St Edmunds since 1280 found that 7,120 pounds of silver had been minted in 1280–97, and that the output of 1297–1319 was 22,480 pounds.<sup>18</sup> These quantities of silver would have provided between £7,209 and £7,268 in 1280–97, and £22,761 in 1297–1319, with annual averages of about £400 and £1,000 in the two periods.<sup>19</sup>

The account of John de Burnedisse includes Hock Day payments and church offerings, like the account of 1256–8. A total of 12d. was paid to the servants of the mint on Hock Day, and they also received drink-money on two occasions costing 5d. in all. John de Burnedisse, the two die-keepers, the assayer and four servants had a total of 16d. in church offerings at Easter, and 5d. was paid to five mint labourers (garcionibus de cuneo), for their offerings. The four mint officials are well-known from documentary evidence, but this seems to be the only known evidence for the number of ancillary staff in an English ecclesiastical mint.

#### APPENDIX

BL Harley MS 645, fol. 219

[In this transcript abbreviations have been extended if their meaning is unambiguous. The letters j and u have been substituted for i and v as required by modern usage, and the capitalisation and format have been standardised. The folio begins with part of a sacrist's account, listing payments to servants of the abbey, merchants and others. The sacrist's payments include 70s, to Henry de Wypelford for two mills, and 55s. 9d. to John de Burnedisse (Burnedys), without explanation.]

Proficuus cuneii

Ad festum Sancti Gregorii de argento Johannis de Burnedys xiiijli. vijs. per pond'

tall' xiiijli. li' vjd.

In festo Annuncionis Beate Marie de argento Willelmi de Swaffiam xxj/i. iiijs. ijd. per pond'

tall' xxli. li' xiiijd.

In festo Pasch' de argento eiusdem Willelmi xlij*li.* vs. vjd. per pond'

tall' xili. li' xiijd.

Item de argento domini prioris vili. xjs. viijd.

De thesaur' xlvijs, iijd, per pond'

tall' xliiijs, viijd, li' xijd,

Die Sancte Witburge de argento Henrici de Coloyne iiijxxvli, per pond'

tall' iiijxxli, lvijs, vjd, li' vjd,

Item de eodem iiij 'sli, xlvjs, viijd, per pond'

tall' iiij<sup>xx</sup>li, vs. vjd. li' vjd.

Eodem die argento Henrici de Wypelford xxiij/i. xvjs. viijd. per pond'

tall' xxiijli. vs. ijd. li' vjd.

De argento eiusdem xxxijs. ijd. per pond'

tall' xxxs. li' vjd.

Item de eodem xvjs. jd. per pond'

tall' xvs. vijd. li' vjd.

Eodem die de argento Aylbrith de Bruneswyk Ixvli. xvs. per pond'

tall' lxiiijli, ijs jd, li' vjd,

Item de eodem xxxli, xviijs, per pond'

tall' xxixli, vijs, xijd, li' xijd,

Item de eodem xxxvjs. vjd. per pond'

tall' xxxvs. vijd, li' vjd.

Die Sancti Apolinaris de argento Henrici de Colon' Cs. xxxd. per pond'

tall' Cs li' vjd.

De argento Johannis de Burnedys xxxjli.

tall' xxxli, vs. li' vid.

Summa totius recept' per tall' CCCCli. xls.

Summa proficuus denar' xli. xijd.

Expen'

In expens' W. subsacriste et Johannis de Burnedys versus Len' vs. vd.

Item die Pasch' in oblacionibus Johannis de Burnedys ij custod' Rob' le Assaiur et iiijor servientium de cuneo svid

Item v garcionibus de cuneo vd.

Item die Hokeday omnibus servientibus de cuneo de consuctudine xijd.

Item relaxat' domino priori de vjli. xjs. viijd. quos mutavit iiis. vid.

Dat' per ij vices servientibus de cuneo ad pot' vd.

In reparacione parietum et ostiorum fabrice xxiijd, qu

In dimidio sextario vini dat' Henrico de Wypelford vjd. die transl' Sancti Benedicti

In expens' in crastino Sancti Benedicti Henrici de Wypelford et aliorum iiijor mercatorum in Cantua vjs.

In present' datis domino Rogero de la Leye et thes' de scaccario et Ricardo Abel iijs. iijd.

Item in j puca emp' ad heliot vjd.

Summa xxiiijs, iijd, qa

Lib' Johanni de Sculdham et Willelmo de Scrub iiij [s.] pro CCCCli. fabricat'

Lib' thes' viijli, xijs, viijd, ob, qd

Summa totalis recept' xli. xijd.

Summa totalis expens' xli. xiid.

<sup>18</sup> BL Harley MS 645, fols 134–134v., 154; Cambridge University Library MS Mm.iv. 19, fol, 80v –81v.; *The Pinchbeck Register Relating to the Abbey of Bury St Edmunds*, edited by F. Hervey (2 vols, Brighton, 1925), ii, 15; Dugdale, *Monasticon Anglicanum*, in, 165–6; Ruding, as in n, 4, ii, 219–20.

<sup>&</sup>lt;sup>17</sup> BL Harley MS 3977, fol. 59v; M.D. Lobel, *The Borough of Bury St Edmund's: A Study in the Government and Development of a Monastic Town* (Oxford, 1935), p. 59 note 1; R.J. Eaglen, 'The Mint at Bury St Edmunds', in *Bury St Edmunds: Medieval Art, Architecture, Archaeology and Economy*, edited by A. Gransden (British Archaeological Association Conference Transactions 20, 1998), pp. 111–21, at p. 118.

<sup>&</sup>lt;sup>19</sup> 245d, were minted from a pound of silver from January 1280 to February 1281, and 243d, thereafter: M. Mate, 'Monetary policies in England, 1272–1307', BNJ 41 (1972), 34–79, at pp. 50–1, 53; Mayhew, as in n. 8, pp. 119, 134.

# AN EDWARD III CLASS 15d PENNY OF READING1

### MARTIN ALLEN AND MIKE R. VOSPER

IN 1125 Henry I's foundation charter for Reading Abbey included a grant of the right to have a mint and a moneyer in Reading, and a subsequent charter of Henry I modified this to a grant of a moneyer in London.2 Charters of Stephen, Henry II, Richard I and John confirmed the abbey's minting rights. The charter of Henry II granted a moneyer in Reading or London, and the right to have a London moneyer made its last appearance in Richard I's confirmation. The Reading mint was omitted from a charter of Henry III, and it was specifically excepted from a charter of Edward II.3 The Fox brothers suggested that Edward I class 1d pence of London with an annulet on the king's breast in the portrait may have been struck for the abbot of Reading, but in the absence of documentary evidence this suggestion must remain speculative.4 In 1338 a charter of Edward III revived the abbey's minting rights, with the additional concession of the right to have dies for halfpence and farthings. A writ of 26 August 1338, reissued on 8 November, cited the charter and instructed the exchequer to supply dies for pence, halfpence and farthings.5 A second writ of 17 November 1338 required the warden of the London mint to supply the dies by 25 November, with a mark and inscription (impressione et circumscriptura) to be specified by the abbot.6 On 22 February 1339 a final writ to the exchequer stated that the abbot and monks of Reading had received their penny die, and it ordered the delivery of halfpenny and farthing dies being kept by the exchequer.7

No Reading farthings of Edward III's 'star-marked' coinage of 1335-43 are known at present, but star-marked halfpence of Peter Woodhead's last three classes (3, 4 and 5) have been recorded.8 The output of the London mint during the coinage of 1335-43 consisted entirely of the debased (10 oz. fine) star-marked halfpence and farthings authorized in 1335, and Jeffrey North has suggested that Reading Abbey received the unprecedented right to mint these coins because the minting of sterling silver pence was unprofitable.9 The Fox brothers noted the probable unprofitability of minting pence in Reading before the weight reduction of 1344, but they predicted that a Reading penny from the dies of 1338 would be found. 10 This prediction has been fulfilled at last by a metaldetector find, probably from the vicinity of Harlow, Essex, which came to light in 1999 and has since been acquired by the Fitzwilliam Museum, Cambridge (See Fig. 1). The long-awaited penny may have been minted before the delivery of the halfpenny and farthing dies, ordered by the writ of February 1339, provided a more profitable alterna-

The new coin is broken, and it weighs only 1.16 g or 17.8 gr. It is the only penny definitely attributable to the coinage of 1335–43 at present, but penny dies were authorized for Durham in 1336 and Bury St Edmunds in 1340.<sup>12</sup> The dies seem to be from irons of class 15d used before 1335: there may have been no need for new irons in 1338, as demand for penny dies between 1335 and

- Acknowledgements: Dr Mark Blackburn, Mr Jeffrey North, Lord Stewartby and Mr Peter Woodhead have read drafts of this note and offered many useful suggestions.
- <sup>2</sup> R. Ruding, Annals of the Coinage of Great Britain and its Dependencies from the Earliest Period of Authentic History to the Reign of Victoria (3rd edn., 3 vols, 1840), i, p. 165, n, p. 56; W.J. Andrew, 'A numismatic history of the reign of Henry 1(1100–1135)', NC 4th ser. 1 (1901), 372–6.
- <sup>3</sup> Ruding, as in n. 2, ii, 155–6; W.H.D. Longstaffe, "The Reading penny", NC 3rd ser. 9 (1889), 348–52, at pp. 349–50; H.B.E. Fox and S. Fox, 'Numismatic history of the reigns of Edward I, II, and III [part 1]", BNJ 6 (1909), 197–212, at p. 209; H.B.E. Fox and J.S. Shirley-Fox, 'Numismatic history of the reigns of Edward I, II, and III [part 5]", BNJ 10 (1913), 95–123, at pp. 96–7.
- <sup>4</sup> H.B.E. Fox and S. Fox, 'Numismatic history of the reigns of Edward I, II, and III [part 2]', BNJ 7 (1910), 91–142, at p. 108. J.J. North and others, The J.J. North Collection: Edwardian English Silver Coins 1279–1351 with Some Supplementary Examples, SCBI 39 (1989), pl. 20, nos. 513, 516 illustrates London pence from an obverse dies of class 10ab3 (c. 1302–3) with annulet on the breast.
  - 5 Ruding, Annals of the Coinage, p. 156; Fox and Shirley-Fox, 'Numismatic history (part 5]', p. 120 (document lxxviii).
  - <sup>6</sup> Ruding, Annals of the Coinage, p. 156; Fox and Shirley-Fox, 'Numismatic history [part 5]', p. 120' (document lxxix).
  - <sup>7</sup> Fox and Shirley-Fox, 'Numismatic history [part 5]', pp. 120-1 (document lxxx).
- <sup>8</sup> P. Woodhead, 'The early coinages of Edward III (1327-43)', in J.J. North and others, The J.J. North Collection. Edwardian English Silver Coins 1279-1351 with Some Supplementary Examples, SCBI 39 (1989), pp. 54-78, at p. 74.
  - <sup>9</sup> J.J. North, 'A new denomination for the abbatial mint of Reading', NCirc 93 (1985), 296.
  - <sup>10</sup> Fox and Shirley-Fox, 'Numismatic history [part 5]', pp. 108, 110.
- 11 N.J. Mayhew, 'From regional to central minting, 1158-1464', in A New History of the Royal Mint, edited by C.E. Challis (Cambridge, 1992), pp. 83-178, at pp. 144-5, 148 discusses the debased coinage of 1335-43. 244\frac{1}{2}d. in debased halfpence and farthings was paid for a pound of silver, but the mint prices in undebased pence were only 232\frac{1}{2}d. for English silver and 237d, for foreign silver.
- silver.

  12 Calendar of Close Rolls 1333–1337, p. 632; Calendar of Close Rolls 1339–1341, p. 363; British Library Harley MS 645, fols 125v., 129; Fox and Shirley-Fox, 'Numismatic history [part 5]', pp. 107–8, 116–19 (documents !xxv-lxxvii); Woodhead, 'The early coinages of Edward III', pp. 60–3. The Bury St Edmunds pence attributed to class 15d could have been minted from dies ordered by a writ of 22 January 1327, the dies supplied at the time of the exchequer presentation of John Taloun as the Bury St Edmunds moneyer in 1329, or the dies authorized by a writ of 10 February 1340 and ordered on 30 April 1340, after the surrender of old dies. The writ of 10 February 1340 stated that the old dies were unusable due to wear, apparently indicating that class 15d pence had been struck from the dies of 1329.





Fig. 1

1338 was minimal or non-existent. The reverse die must have been made in 1338, but the obverse die could have been taken from stock made before 1335. The obverse

legend has a 'Lombardic' letter N, which is a characteristic of most class 15d dies. The surviving portion of the reverse legend reads VILILARI—I-GY, with the remnant of a letter that is probably a Roman letter N before the G. This may be reconstructed as VILILARIADIINGY, which is the inscription on the class 3 star-marked halfpenny and the third or 'Florin' coinage (1344–51) pence, halfpence and farthing of Reading, with variations in lettering. Under the terms of the writ of 17 November 1338 the abbot of Reading, or someone on his behalf, had the authority to specify this inscription and the scallop mark found in one quarter of the reverse of all of the Reading coins.

# DIES FOR THE HEAVY AND LIGHT PENCE, 1399-14221

#### ERIC HARRIS

In attempting to discuss the pence of Henry IV (1399-early 1413) and of Henry V (1413-22) one is dealing with a series in which few of the early issues remain with us. These are usually in the care of Museums. Hence one has to utilise photographs of coins having varying degrees of discolouring which were often poorly struck from imperfect dies. Changes to the dies were made during their use by striking additional or changed marks on them The reasons which may explain the changes seen on the coins have to be inferred rather than found in Mint Records; certainly poor technology and a variable demand for coinage played a major role.

Previous descriptions of some of the coins have appeared in works by Brooke? and Potter³ and a series of notes in a Trade Journal.⁴ Potter does not deal with the pence struck at Durham and York. Some relevant data given by him are that the Mint Master appointed by Henry IV took over in London on 14.10.1399 and that until 1408 only 1398 lb of silver was used to strike halfgroats, pence and halfpence. There is no evidence for heavy groats having been struck in Henry's name. The small amount of silver used reflects the fact that it was not profitable to produce coins at 18 grains per penny, so few coins were struck. Henry's usurpation made it was essential to remove or replace the name RICARD so new or altered dies had to be used. At this time resort was also made to the

use of obverses of Edward III paired with reverses of Richard to strike some half groats.<sup>5</sup> These have no contraction mark over the terminal N of LONDON. An important source of illustrations of rare Henry IV coins is the Sotheby Sale Catalogue of the first Walters collection in 1913 where the quality of the photographs surpasses that found in recent publications. Most of the more numerous later coins illustrated were in the Delmé-Radcliffe Collection which was photographed by Mr E. Baldwin before their Sale.

In 1408 it has been inferred from the absence of Mint accounts that the Mint was closed. After an abortive proposal in 1409 for a reduction to 16 grains silver per penny<sup>6</sup> the weight was decreased to 15 grains silver in 1412 and coinage recommenced. In the interval until his death in March 1413 Henry IV's short lived 'Light' issue was made. These coins were made distinguishable from the heavy coins at London by their having an annulet and a pellet about the crown and on the York pence by adding an annulet onto the King's breast. The weights of surviving pence of the heavy issue are not a very useful guide because of wear and clipping though they tend to weigh slightly more than 15 grains (see the Attenborough hoard' weights). The following account is based on photographs, so no weights or die axes can be given.

A useful way to distinguish between coins made from

- <sup>13</sup> The dies authorized for the Durham mint in 1336 may have been supplied, but there is no reason to suppose that any other mint received penny dies between 1335 and 1338.
  - 14 The class 3 halfpenny has the star mark after VILLA.
- <sup>1</sup> Acknowledgements: My thanks are due to Lord Stewartby and to Mr Peter Woodhead for encouragement and their helpful suggestions. Photographs of some rare specimens were taken for me by Mr T. Webb-Ware when we visited Christopher Blunt. The Blunt collection was bequeathed to the Fitzwilliam Museum. I am grateful for provision or permission to use photographs to Dr Barrie Cook at the British Museum, to Prof. M. Metcalf (then at the Ashmolean Museum) and to Mr M. Sharp of Messrs A.H. Baldwin & Sons (for photographs of part of the Delmé-Radcliffe Collection). Mr S. Laidlaw of the Dept of Archaeology, University College, London, gave me a great deal of photographic help. Historical allusions were obtained from 'The Life and Times of Henry V' by Peter Earle published by Weidenfeld and Nicholson, 1972.
  - <sup>2</sup> G.C. Brooke, 'Privy Marks in the Reign of Henry V' NCirc (1930), 44-87.
  - <sup>3</sup> W.J. Potter, 'The Silver Coinages of Richard II, Henry IV and Henry V', BNJ 29 (1959), 334-52.
    - W.J. Potter, 'The Silver Coinages of Richard II, Henry IV and Henry V', BNJ 30 (1960), 124-50.
  - E.J. Harris, 'Silver Coinage in the Henry V Period' in Seaby Coin and Medal Bulletins (1990) Nos 848, 851, 853-5
  - 5 See Potter (1959), as in n. 3.
  - <sup>6</sup> C.E. Blunt, 'Unrecorded Heavy Nobles of Henry IV and Some Remarks on that Issue' BNJ 36 (1967), 106–13.
  - <sup>7</sup> M.M. Archibald, 'The Attenborough Notts., 1966 Hoard', BNJ 38 (1969), 50-83.

dies or those cut using clichés prepared originally for the heavy coinage and those made specifically for the light coinage is to measure the diameters of the beaded circles forming part of the type. Earlier or 'heavy' types have circles measuring about 1 mm more than the corresponding diameter on the later or 'light' type.8 The quoted measurements were made between the centres of the circumferential dotted lines. Applied to the light groats of Henry IV one finds that the first type (Potter's type III ) has a circle round the portrait or mint signature of 20.5 mm diameter. in contrast to 19.5 mm on his later issues and those of Henry V. This suggests that the type III dies had been prepared for the heavy issue but were then modified by adding the annulet and pellet of the light issue. The heavy halfgroats, and what are presumably the early light halves struck from dies cut from puncheons of the heavy type, have a circle diameter of 16.5 mm, whereas on later types it is 15.5 mm. On the pence the diameter of the circle was 12.5 mm, and is only 11.5 mm on the first of the light dies. The lengths of the long cross arms on the reverse were also reduced. Similar shrinkage of the type impressed can also be seen on the later (i.e. Henry V) halfpence, though most examples with the marks added to distinguish the light issue still have the larger inner circle and incomplete letters. The use of the bigger inner circle applied to a smaller flan yields coins having a clipped appearance, and makes for difficulty in reading the legends. A likely consequence of the gap in mintage between 1408 and 1412 would have been that the skilled workers would have dispersed, so leaving the Mint without the metallurgical knowledge to produce tough new dies. This would account for there being very few coins struck from the brittle new dies for the light coinage whereas more are found from strikings using the better tempered heavy coinage dies with added light coinage marks. The short time interval between the re-opening of the Mint and Henry's death also restricted the amount of light coinage from either sort of die produced for him. Although the light coinage continued after his death, it seems probable that his son, Henry V, immediately ordered the currency to be marked with a mullet, cutting short the production of coins with an annulet with or without a pellet, which are rarer than those struck from dies bearing the mullet. Henry V was preparing to wage a campaign in France, having already made in 1413 an agreement to secure the neutrality of the Duke of Burgundy. For the planned invasion of the Armaguac controlled French territory Henry needed a large supply of money for equipment and soldiers, so causing a sudden leap in the rate of coinage. The need for currency would account for the use of mulletmarked dies made from the old 12.5 mm inner circle puncheons and various portraits, including some used on half groats. As the workers became more skilled, new puncheons and hence dies of more consistent type would have become available to strike the later coins.

### Henry IV, the heavy coinage (1399-1408)

The discussion of the coins has been separated for each issue into coins of which I found a useful illustration bearing the names of London, Durham or York. This has the advantage that use of modified dies at each mint can be followed. Each section is followed by a summary of the salient distinguishing points. At London, the first candidate for inclusion is a coin struck from Richard II dies, on which the name of the king is blurred as if an attempt has been made to change it. (Pl. 18, L1) A Richard penny, perhaps from the original dies, is illustrated by Purvey.9 Altered groat dies have been illustrated by Potter. 10 It is relevant to remark that to add marks to a hardened die would be a problem unless suitable heat treatments were given. What may be the first London dies made for Henry have a large bust on a short neck and legend ending ANGLEF (Pl 18, L2) Next, for the heavy issue at London, appears a new die (Pl 18, L3) with an uncertain mark on the breast, and a reverse having an extra small pellet under TAS and a slipped trefoil after DON. The portrait on this die closely resembles that seen on the Durham coin (Pl 19, D1), though the mark on the breast appears to have been altered.

At Durham, evidently a pair of heavy dies were prepared but I have only found illustrations corresponding to their use after modification of the obverse by adding a mark right of the crown, as noted later.

At York the Archbishop's mint only struck pence, and here their production seems to have been greater than at London, if the number of specimens known now is a guide. In the Reigate (2) hoard there were about 11 London pence and about 185 from York. In the Attenborough hoard there were 16 Henry IV pence, of which 12 were classed as being of the heavy issue. The heavy coins were struck from two dies; the end of the obverse legend on one is FRANCIE (Pl. 19, Y1), and on the other FRANC'. The latter is illustrated (Pl. 19, Y2) on a coin from a die which may have been altered by adding a mark right of the crown and so properly would belong to the light issue. Both obverses and reverses have the 12.5 mm diameter circles.

Summary, in the references W = Walters 1913 Sale, RCL = in Lockett Sale, pc = in private collection

Plate No.	Circle die	ameters, mm.	Distinguishing features	Ref
L1	Obv. 12.5	5 Rev. 12.5	Blurred alteration of Richard die?	(pc)
L2	>1	14	Bust with short neck, legend ends ANGLxF	(Attenboro' 988)
L3	,,	**	Bust with long neck, mark on breast, rev has extra	
			pellets in TAS quarter and mark after DON.	(W.264)
ΥI	**	**	Legend ends FRANCIE see also RCL1370	(pc ex Attenboro')

<sup>8</sup> E.J.Harris, 'Odd Pence of Henry V' in SCMB (1989), No 846.

<sup>&</sup>lt;sup>9</sup> P.F. Purvey, 'The Pence, Halfpence and Farthings of Richard JI of the Mints of London, York and Durham', BNJ 31 (1961), 88-108

<sup>10</sup> Potter (1960) as in n. 3.

# Henry IV, the light coinage (late 1412-March 1413)

An expedient to produce light pennies was to use the heavy dies marked on the obverse with a pellet and annulet in either sense about the crown. The annulet continued to be struck into the dies for halfpence, pence and half groats over most of Henry V's reign. The earlier annulet puncheon seems to have been produced by folding a lamina round a pin so the circle was not continuous, With use a gap developed to give rise to the 'Broken Annulet' mark. Sometimes the inside of the annulet became clogged up and then the puncheon made a large pellet or bullet mark. Eventually a new slightly larger closed annulet was used, like that on Henry VI's Annulet issue. A possible example of an early light penny (Pl. 18, L4) has unclear marks. It was altered from the original heavy die of Pl. 18, L2. Another coin with the 12.5 mm diameter inner circles has a pellet left and bullet right of the crown, a slipped trefoil on the breast and the legend ends ANGLIE. It is paired with a reverse having Lombardic R's in LORDON (Pl. 18, L5). There are also two examples from the new light dies with circles 11.5 mm diameter. These have the pellet right and annulet left of the crown and legend ending ANGLIE, with either a small portrait (Pl. 18, L6) or a larger portrait (Pl. 18, L7): their reverses have backward barred Roman N's in LOUDON. An entirely different style appears on the penny analogue of the 'emaciated bust' groat (Pl. 18, L8 and L9), with a large head set low in the circle and a different font with wide O's and N's the annulet left of the crown and pellet on the right. This obverse with ending ANGL appears with two reverses, of which one has an unusual inner circle of 10.5 mm diameter. Next (Pl. L10) is an example with the 11.5 mm inner circles both sides and bearing weakly struck marks, perhaps a mullet left and a pellet right of the crown. It has a new bust with high crown and downturned lips as on the 'scowling bust' groats; this coin is placed here because it has the same letters as those used on the emaciated bust coins and has a similar reverse. The sequence of portraits conforms with that proposed for the groats. It is important because one sees that the high crown has been introduced at this time. No detailed study of the reverse dies was made because often only part of the lettering is on the flan.

At Durham, a modified heavy penny die has a slipped trefoil on the breast and an annulet left and pellet right of the crown (Pl. 19, Dl). On the reverse there is a mark, possibly a slipped trefoil (\*), after OLM, and saltires before CIVI and TAS. A similar bust, now with annulet on the breast and mark (annulet or mullet?) right of the crown in a 12.5 mm circle, is struck against a die with an 11.5 mm circle and a + before CIVI (Pl. 19, D2).

For the York mint, an example of use of a modified heavy die is shown in Pl 19, Y2 with annulet left and pellet right of the crown. Two coins from dies with 11.5 mm diameter circles have an annulet on the breast but different portraits; that on Pl. 19, Y3 has a long neck and small face and the legend includes DI GRA whereas the coin on Pl. 19, Y4 has a long face and short neck, there is a double annulet stop after hearl. The reverse inner circles have the smaller diameter, and a double annulet stop before eBO.

Summary, Abbreviations Potter = item no in Pl. 10 of his paper in BNJ 30, Norweb = Norweb Sale (at Spinks, in 4 parts)

<i>Plate No.</i> L4 L5	Circles diameters, mm Obv. 12.5 Rev. 12.5	Distinguishing features Perhaps • and ○ added to die of L.2 New portrait, ○ and • about crown, marks on breast	Ref. (pc) (pc BNJ 30, p. 190)
LU		Pear shaped pellets in rev, Lombardic Ns	(= Potter 12)
L6	Obv. 11.5 Rev. 11.5	New portrait, 0 and • about the crown, ? slipped trefoil on breast, Us in rev.	(Potter 14 = BM& Norweb 4,1349)
L7	" "	Larger portrait, rest as L.6	(Potter $13 = BM$ )
L8	,, ,,	Portrait low in tressure, emaciated bust, squat lettering o and • about the crown	(Potter 16 = Norweb 1, 169)
L9	" Rev 10.5	Obv. as L.8, reverse has smaller circle	(BM)
L10	Obv 11.5 Rev 11.5	New portrait, scowling bust, letters as last 2. ○ and • about crn	(W263 = Ashmnolean)
DΙ	Obv 12.5 Rev 12.5	Portrait like L.3 but clear slipped trefoil on breast,  • rt of crown, rev has xCIVI, TAS+ (?), OLM  **TAS+	(W 254).
D2	Obv 12.5 Rev 11.5	Smaller scale bust with o on breast, rev has +CIVI	(RCL 1385)
Y2	Obv 12.5Rev 12.5	Legend ends FRANC, ○ left • right of cm.	(RCL 1371, Attenboro' 1000)
Y3	Obv 11.5 Rev. 11.5	New bust with long neck and crude face with wide cheeks	(Ashmolean)
Y4	** **	Well drawn bust, long face short neck, o on breast	(W 255)

#### Henry V (April 1413-1422)

It is uncertain at what stage of these issues the accession of Henry V occurred, but it is attractive to follow Potter's argument that the addition of the mullet to the dies marked the accession of Henry V. The mullet normally has five radiating finger-like lines, but at York some non-standard puncheons were also made. Coins of all denominates

nations from nobles to some halfpence bear the mark, which was added to existing and new dies. The pence were struck for London, Durham and York.

At London, coins having the new 11.5mm obverse inner circles with annulet left and mullet apparently over a pellet on the right of the crown (Pl. 18 L11, 12, 13 obverses) illustrate the type, probably the die, of Pl. 18, L6 with mullet added over the pellet left of the crown.

The reverses have 12.5 mm diameter circles and they have Lombardic Ns. The reverse of (Pl. 18, L11) has no mark after TAS whereas that of L 12 has a reverse like that of L3, with saltires after TAS and DOR, P1, 18, L13 has the same obverse, though with the crown deteriorated and a different heavy die reverse with a + after DON. On Pl 18, L14 one sees a simple crown with annulet left and mullet (?) right and an entirely different portrait with a U-shaped facial outline, as occurs on some groats of the period. 11 Both sides have 12.5 mm circles. There is now a change in the general description to annulet right and mullet left of the crown. There follows a series of new types which have 12.5 circle diameters. They presumably represent attempts to strike coins from any dies which could be cut from available puncheons or clichés. On Pl. 18 L15 the portrait has a high crown, the legend ends with FRANC. It was important to mention the claim to France. This type is followed by the examples in Pl. 18, L16-19, all struck from dies having 12.5 mm diameter circles on both faces. The subsequent specimens (Pl. 18, L20-22) are taken from a gallery which are all struck from 11.5 mm inner circle dies on both faces. This points to the ability to make usable dies having been restored, though without standardisation of the product. The annulet at the right may be closed or open, and both its location and that of the mullet varies between against the crown band and against the locks of hair. These types presumably were struck to provide funds for the campaign in France and have F, FR, FRA or FRAD at the end of the obverse legend. Next, a trefoil of pellets was substituted or stamped over the annulet at the right (Pl. 18, L23). The trefoil, which is also found on halfgroats and halfpence as well as on the York pence, may be indicative of the restitution of the trials of the Pyx, though it is not found on the groats. In what would have been an uncertain time, either when Henry V was in a decline, or as a pre-Annulet issue for Henry V, there are coins, including halfpence and halfgroats, without any marks or French title (Pl. 18, L24).

At Durham, a bust (P1. 19, D3) resembling that on D.1 with annulet left and mullet right of the crown was used in an 11.5 mm circle, and this obverse was struck against an 11.5 mm circle reverse. The next coin, (Pl. 19, D4) with a new bust with the hair locks closer to the face in an

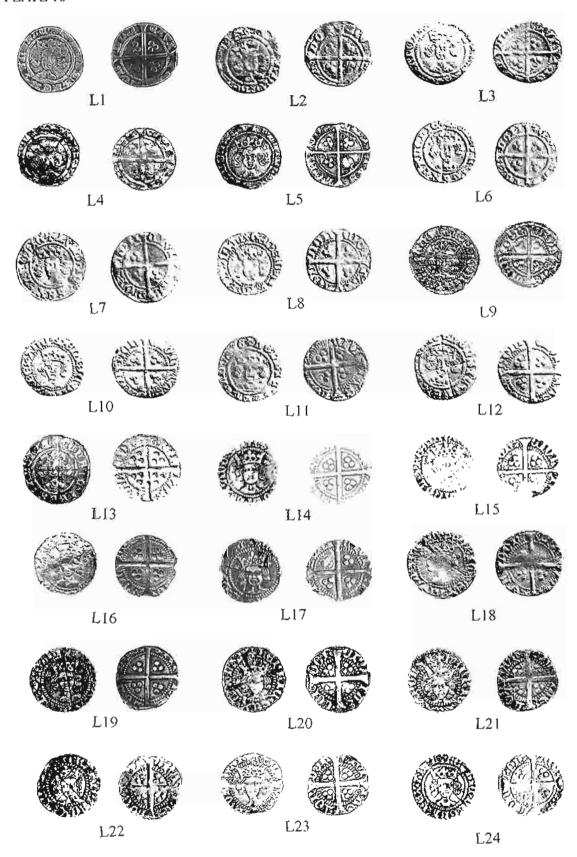
11.5 mm circle, has an annulet left and mullet right of the crown and reverse with 12.5 mm circle and a large I at the end of CIVI. Next an entirely different later style bust, with larger V-shaped face and high crown with mullet left and annulet right is struck against a 12.5 mm circle reverse (Pl. 19, D5). Another new bust with U-shaped face and annulet right and mullet left of the tall crown also has a 12.5 mm circle on both faces (P1. 19, D6). After this, the civil unrest due to the Lollards and the Mortimer rebellion may have stopped Mint activity at Durham for a time. A new and final type, struck perhaps late in the reign, with 11.5 mm circles on both faces, has an intact annulet right and mullet left of the crown. The reverse has an annulet inserted between the three pellets under CIVI (P1, 19, D7 and D8). It is difficult to find suitable illustrations, for there are few Durham specimens. The coinage from this Mint recommences in the rosette-mascle issue of Henry

At York, a heavy obverse die was modified by adding a mullet left and pellet right of the crown (Pl. 19, 5). It was used with a reverse with 12.5 mm circle. As mentioned above, the abortive Mortimer rebellion, which involved the nephew of Archbishop Scrope, may well have led to the temporary cessation of Mint activity at York. There follows a variety of new types including several (Pl. 19, Y6-Y10) from dies having the larger inner circle of the heavy issue. The die sinker of the coin Y6 evidently had to create a mullet mark. The next examples are of coins struck from new light dies with mullet left and annulet right of the crown (Pl. 19, Y11-Y13) or hair (Pl. 19, Y14). They have circles of various diameters between 11.5 and 10 mm, as listed in the following Summary, and in common with the remainder (Pl. Y15-Y18) may be from local dies. On presumably later dies, the marks are changed to mullet left and a trefoil of pellets right (Y15-Y17 and Norweb 1 Sale, 170) On Y16 the trefoil seems to be over an annulet. The trefoil recalls its use at London. The final coin (Pl. 19, Y18) has a mullet left and lys at the right and also has an annulet between the pellets under CIVI as seen on the last Durham coins.

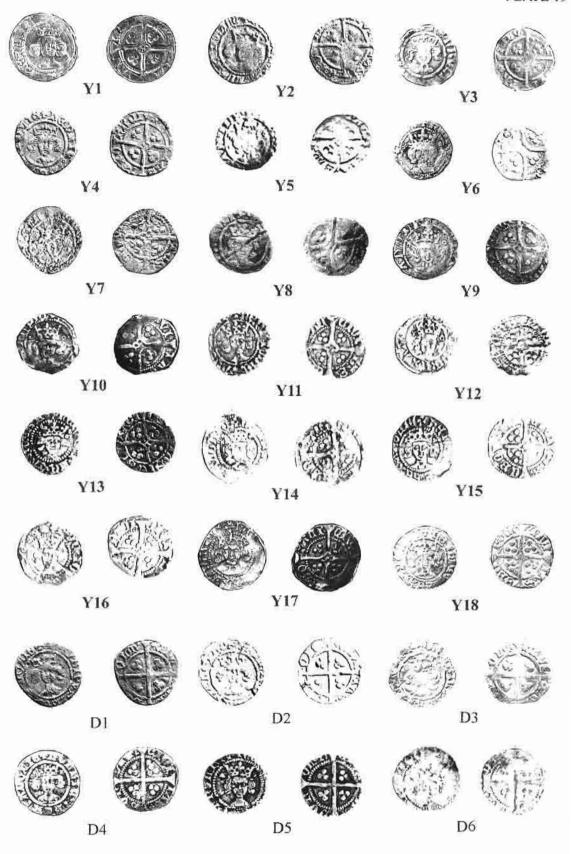
Summary, PDR = in photographs of the Delmé-Radcliffe coins.

Plate No.	Circle diameters, mm	Distinguishing features	Ref
		(L11-L14 have O left and mullet rt of crown)	·
ĹIJ	Obv. 11.5 Rev. 11.5	Die of L.6 with mullet on pellet right of crn. No stop after TAS	(Potter 15 ≠ FitzWilliam)
L12	Obv.11.5 Rev. 12.5	Obv same as last. Saltire after TAS, perhaps rev. die of L.3	(W.264 = RCL1389)
L13	Obv. 11.5 Rev. 12.5	Same Oby, now with crown damaged. * after TAS	(p.c)
L14	Obv. 12.5 Rev. 12.5	Large U-shaped face, simple crown, rev like that of L.12 (L.15-L.22 have mullet left and O right of crown)	(PDR)
L15	Obv. 12.5 Rev. 12.5	Tall crown, long neck, narrow bust, double saltires after TAS and DOR	(W.282 & PDR)
L16	55 19	Shorter neck, V-shaped face, saltire after TAS. +(?) after DON	(BM)
L17	''	U-shaped face, high cm., legend ends FRARC	(PDR)
L18	" "	Thin neck, hair longer than L.15 hair legend ends FRA	(W.282)
L19	" "	Smaller smiling face, legend ends FR	(PDR)

<sup>&</sup>lt;sup>11</sup> E.J. Harris (1997) 'Die Pairing on the Transitional Coins of Henry IV and Henry V', BNJ 67 (1997), 20-9.



HARRIS: DIES FOR THE HEAVY AND LIGHT PENCE, 1399–1422 (1)



L.20		Circle diameters, mi	- 0 07	Ref
Crown, legend ends F   CPDR   L22	L.20	Obv. 11.5 Rev 11.5	Similar but in smaller circle, legend ends f	(PDR)
L.22	L.21	", "	V-shaped face, bust low in field with long finials to	
L.22 " " Has mullet left and trefoil right of crown, legend ends FR (PDR) L.24 " " No marks in field, legend ends ARGL and includes DI GRA (PDR) D.3 " Rev 12.5 New bust with compact hair, o left and mullet rt of crown (W.265) D.5 Obv. 12.5 Rev 12.5 New bust with compact hair, o left and mullet rt of crown (W.265) D.6 " New style, high crown and large V-shape face, mullet left or rt of crown D.6 " New bust, high crown, U-shape face, marks as last (Attenboro' 1020 = PDR) D.7 Obv. 11.5 Rev. 11.5 Late style. lower crown, mullet left, o rt. of crown, o in pellets under CIVI (Reigate 2) Similar to last (PDR) Y.5 Obv. 12.5 Rev 12.5 Marks added to heavy die. (PDR) Y.6 Obv. 11.5 Rev. 11.5 Bust with much hair, high crown, composite mullet (PDR) Y.7 " New bust with high crown, V-shaped face (PDR) Y.8 Obv. 12.5 Rev 12.5 Large face with simple crown (p.c) Y.9 " " U-shaped face on long neck (p.c) Y.10 " " Similar to last but different die (pc) Y.11 Obv. 10.5 Rev 11 Sev 10.5 Large U-shaped face, high crown Y.12 Obv. 10.5 Rev 11 U-shaped face, high crown Y.13 Obv. 10.5 Rev 11 U-shaped face, high crown Y.16 Obv. 11 Rev. 11 U-shaped face, close knit crown with mullet left, o right of hair (PDR) Y.16 Obv. 11 Rev. 11 U-shaped face, close knit crown with mullet left, o right of hair (PDR) Y.16 Obv. 11 Rev. 11.5 Mullet left and trefoil of pellets right of crown (PDR) Y.17 Obv. 11 Rev. 11 High crown, long neck, mullet left and trefoil right of crown (PDR) Y.17 Obv. 11 Rev. 11 High crown, long neck, mullet left and trefoil right of crown (PDR)			crown, legend ends F	(PDR)
No marks in field, legend ends APGL and includes DI GRA   (PDR)	L.22	"	U-shaped face legend ends FRA	(PDR)
D.3 " " Probably an o left and muller tr of crown, bust like D1 (p.c)  D.4 " Rev 12.5 New bust with compact hair, o left and muller tr of crown  D.5 Obv. 12.5 Rev 12.5 New style, high crown and large V-shape face, mullet left or or of crown  D.6 " " New bust, high crown, U-shape face, marks as last (Attenboro' 1020 = PDR)  D.7 Obv. 11.5 Rev. 11.5 Late style, lower crown, mullet left, ort. of crown, o in pellets under CIVI (Reigate 2)  D.8 " " Similar to last (PDR)  Y.5 Obv. 12.5 Rev 12.5 Marks added to heavy die.  Y.6 Obv. 11.5 Rev 11.5 Bust with much hair, high crown, composite mullet (PDR)  Y.7 " New bust with high crown, V-shaped face (PDR)  Y.8 Obv. 12.5 Rev 12.5 Large face with simple crown  Y.9 " " U-shaped face on long neck (p.c)  Y.10 " " Similar to last but different die (pc)  Y.11 Obv. 10.5 Rev 11 Sex 11 U-shaped face, high crown (PDR)  Y.12 Obv. 10.5 Rev 11 U-shaped face, high crown (PDR)  Y.13 Obv. 11 Rev. 11 U-shaped face, close knit crown with mullet left, o right of hair (PDR)  Y.16 Obv. 11 Rev. 11 U-shaped face, close knit crown with mullet left, o right of hair (PDR)  Y.16 Obv. 10.5 Rev. 11.5 Mullet left and trefoil of pellets right of crown (PDR)  Y.17 Obv. 11 Rev. 11 High crown, long neck, mullet left and trefoil right of crown (PDR)	L.23	7) 7,	Has mullet left and trefoil right of crown, legend ends FR	(PDR)
D.3 " Rev 12.5 New bust with compact hair, o left and mullet rt of crown, bust like D1 (P.c) D.5 Obv. 12.5 Rev 12.5 New bust with compact hair, o left and mullet rt of crown (W.265) D.6 " New style, high crown and large V-shape face, mullet left or or of crown D.6 " New bust, high crown, U-shape face, marks as last (Attenboro' 1020 = PDR) D.7 Obv. 11.5 Rev. 11.5 Late style. lower crown, mullet left, ort. of crown, o in pellets under CIVI (Reigate 2) D.8 " Similar to last (PDR) Y.5 Obv. 12.5 Rev 12.5 Marks added to heavy die. (PDR) Y.6 Obv. 11.5 Rev 11.5 Bust with much hair, high crown, composite mullet (PDR) Y.7 " New bust with high crown, V-shaped face (PDR) Y.8 Obv. 12.5 Rev 12.5 Large face with simple crown (PDR) Y.9 " " U-shaped face on long neck (p.c) Y.10 " Similar to last but different die (pc) Y.11 Obv. 10.5 Rev 11 Smaller V-shaped face, high crown (PDR) Y.12 Obv. 10.5 Rev 11 U-shaped face, high crown (PDR) Y.13 Obv. 10.5 Rev 11 U-shaped face, high crown (PDR) Y.14 Obv. 11 Rev. 11 U-shaped face, close knit crown with mullet left, o right of hair (PDR) Y.16 Obv. 10.5 Rev. 11.5 Mullet left and trefoil of pellets right of crown (PDR) Y.17 Obv. 11 Rev. 11 U-shaped face, mullet right of crown (PDR) Y.18 Obv. 10.5 Rev. 11.5 Mullet left and trefoil of pellets right of crown (PDR) Y.19 Obv. 10.5 Rev. 11.5 Mullet left, urfoil ? over annulet right of crown (PDR) Y.17 Obv. 11 Rev. 11 High crown, long neck, mullet left and trefoil right of crown (PDR)	L.24	**	No marks in field, legend ends ANGL and includes DI GRA	(PDR)
D.5 Obv. 12.5 Rev 12.5 New bust with compact hart, o'tel' and number (in Clown (PDR))  D.6 " " New bust, high crown, U-shape face, mullet left o'nt of crown (PDR)  D.7 Obv. 11.5 Rev. 11.5 Late style, lower crown, mullet left, o'nt. of crown, o in pellets under CIVI (Reigate 2)  D.8 " " Similar to last (PDR)  Y.5—Y13 all have mullet left and o'right of the crown.  Y.5 Obv. 12.5 Rev 12.5 Marks added to heavy die.  Y.6 Obv. 11.5 Rev 11.5 Bust with much hair, high crown, composite mullet (PDR)  Y.7 " " New bust with high crown, V-shaped face (PDR)  Y.8 Obv. 12.5 Rev 12.5 Large face with simple crown (p.c)  Y.9 " " U-shaped face on long neck (p.c)  Y.10 " " Similar to last but different die (pc)  Y.11 Obv. 10.5 Rev 11 Smaller V-shaped face and high crown. (PDR)  Y.12 Obv. 10.5 Rev 10.5 Large U-shaped face, high crown (PDR)  Y.13 Obv. 10.5 Rev 11 U-shaped face, close knit crown with mullet left, o'right of hair (PDR)  Y.15 Obv. 11 Rev. 11 U-shaped face, close knit crown with mullet left, o right of hair (PDR)  Y.16 Obv. 10.5 Rev. 11.5 Mullet left and trefoil of pellets right of crown (PDR)  Y.17 Obv. 11 Rev. 11 High crown, long neck, mullet left and trefoil right of crown (PDR)		**		(p.c)
D.6	D.4	" Rev 12.5	New bust with compact hair, o left and mullet rt of crown	(W.265)
D.6 " "New bust, high crown, U-shape face, marks as last (Attenboro' 1020 = PDR)  D.7 Obv. 11.5 Rev. 11.5 Late style. lower crown, mullet left, ort. of crown, o in pellets under CIVI (Reigate 2)  D.8 " "Similar to last (PDR)  Y5-Y13 all have mullet left and oright of the crown.  Y.5 Obv. 12.5 Rev 12.5 Marks added to heavy die. (p.c)  Y.6 Obv. 11.5 Rev 11.5 Bust with much hair, high crown, composite mullet (PDR)  Y.7 " New bust with high crown, V-shaped face (PDR)  Y.8 Obv. 12.5 Rev 12.5 Large face with simple crown (p.c)  Y.9 " "U-shaped face on long neck (p.c)  Y.10 " "Similar to last but different die (pc)  Y.11 Obv. 10.5 Rev 11 Smaller V-shaped face and high crown. (PDR)  Y.12 Obv. 10.5 Rev 10.5 Large U-shaped face, high crown (PDR)  Y.13 Obv. 10.5 Rev 11 V-shaped face, high crown (PDR)  Y.14 Obv. 11 Rev. 11 U-shaped face, close knit crown with mullet left, o right of hair (PDR)  Y.15 Obv. 11 Rev. 11.5 Mullet left and trefoil of pellets right of crown (PDR)  Y.16 Obv. 10.5 Rev. 11.5 Mullet left, trefoil ? over annulet right of crown (PDR)  Y.17 Obv. 11 Rev. 11 High crown, long neck, mullet left and trefoil right of crown (PDR)	D.5	Obv. 12.5 Rev 12.5	New style, high crown and large V-shape face, mullet left	
D.7 Obv. 11.5 Rev. 11.5  Late style. lower crown, mullet left, o rt. of crown, o in pellets under CIVI  D.8 " " Similar to last (PDR)  Y5-Y13 all have mullet left and o right of the crown.  Y.5 Obv. 12.5 Rev 12.5 Marks added to heavy die.  Y.6 Obv. 11.5 Rev 11.5 Bust with much hair, high crown, composite mullet (PDR)  Y.7 " " New bust with high crown, V-shaped face (PDR)  Y.8 Obv. 12.5 Rev 12.5 Large face with simple crown  Y.9 " " U-shaped face on long neck (p.c)  Y.10 " " Similar to last but different die (pc)  Y.11 Obv. 10.5 Rev 11 Smaller V-shaped face, high crown.  Y.12 Obv. 10.5 Rev 10.5 Large U-shaped face, high crown  Y.13 Obv. 10.5 Rev 11 U-shaped face, high crown  Y.14 Obv. 11 Rev. 11 U-shaped face, close knit crown with mullet left, o right of hair (PDR)  Y.15 Obv. 11 Rev. 11.5 Mullet left and trefoil of pellets right of crown  Y.16 Obv. 10.5 Rev. 11.5 Mullet left, trefoil? over annulet right of crown  Y.17 Obv. 11 Rev. 11. High crown, long neck, mullet left and trefoil right of crown  Y.17 Obv. 11 Rev. 11 High crown, long neck, mullet left and trefoil right of crown  Y.17 Obv. 11 Rev. 11 High crown, long neck, mullet left and trefoil right of crown  Y.18 Obv. 11 Rev. 11 High crown, long neck, mullet left and trefoil right of crown  Y.17 Obv. 11 Rev. 11 High crown, long neck, mullet left and trefoil right of crown  Y.18 Obv. 11 Rev. 11 High crown, long neck, mullet left and trefoil right of crown  Y.19 Obv. 11 Rev. 11			ort of crown	(PDR)
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Y.17 Obv. 11 Rev. 11 High crown, long neck, mullet left and trefoil right of crown (PDR)	Y.15	Obv. 11 Rev. 11.5	Mullet left and trefoil of pellets right of crown	(PDR)
Y.17 Obv. 11 Rev. 11 High crown, long neck, mullet left and trefoil right of crown (PDR)	Y.16	Obv. 10.5 Rev. 11.5		(PDR)
	Y.17	Obv. 11 Rev. 11		(PDR)
	Y.18	Obv. 10.5 Rev. 11.5		(PDR)

It may be of interest to mention the numbers of pennies of the three mints which were found in the great Reigate (2) hoard. Several specimens were so encrusted or badly struck that identification was not possible. There seemed to be not more than one of Henry IV, that is without an added mullet. For Henry V including coins with mullet added to heavy coinage dies, there were about thirteen of London, of which five had the 12.5 mm circles; of Durham there were nine, all with the 11.5 mm circles and

of the 185 of York only about seven were struck using one or both dies with the 12.5 mm circles, with the rest having circles not more than 11.5 mm diameter. It is remarkable that dies having the 12.5 mm diameter circles on the reverse turn up on some pennies issued for Henry VI at the mints of London and York, both Royal and Episcopal. Brooke noted the use of Henry V obverse dies with Henry VI reverses on some larger coins.

# CORRECTION TO 'HALFGROATS IN THE HENRY IV-HENRY V PERIOD'

#### ERIC HARRIS

In my note in the last Journal (Vol. 68 pp. 147-8) two errors introduced by the modern equivalent of a typesetter escaped correction. The first is in the obverse legend listed in the Table at line 8 where the 'M' should have been 'm'

identical with the others in the list, the second is the headings of the columns 4, 5 and 6 which should read respectively No. of arcs, Shape offface, and No. on/Pl.

# CALAIS QUARTER-NOBLES OF HENRY VI

#### LORD STEWARTBY

QUARTER-NOBLES of Henry VI, although presumably struck at the three royal mints operating in the 1420s, London, Calais and York, carry no unambiguous indication of their origin - a problem that also applies to the quarter-nobles of Richard II. The larger Calais gold of the annulet issue of Henry VI is plentiful (although much less so than London gold), but the last nobles and half-nobles of this mint, readily identified by the pennant at the stern, belong early in the subsequent rosette (-mascle) issue. In seeking Calais quarter-nobles of this reign we do not therefore need to look beyond the annulet and rosette coinages. Whitton1 attributed the varieties of annulet quarter-nobles as follows:

#### London

Mm. large lis. One small lis above the shield. Sometimes a trefoil (Wh. 2, 3) or pellet (Wh. 4) below shield. All read D1.

#### Calais

Mm. small lis (Wh. 1). One small lis above shield. All

Mm. large lis (Wh. 2-6). Three small lis around shield, one above and one each side. One reads DEI (Wh. 2), others DI.

#### York

Mm. large lis. Two small lis above shield. Dt.

Whitton noted that all the specimens he had seen with two lis above the shield were from a single obverse die, and that this would be consistent with their having been struck at York. Coinage at the royal mint of York was confined to a period within the twelve months from August 1423, and the warden's account shows gold coined in the amount of £42,310 during this period. From 1422 to 1430, approximately the period of the annulet coinage, some £500,000 of gold coin was issued at London. One would expect York gold therefore to be rare, certainly much rarer than that of London.<sup>2</sup> Suitably rare annulet nobles and halves have a lis instead of an annulet by the king's wrist. and these have the more deeply indented feet to letters such as A and T which Whitton noted as being characteristic of the York (and other contemporary) silver. The same forms occur on the two-lis quarters, and Whitton's attribution of these to York, rather than to Calais as Walters<sup>3</sup> had proposed, seems sensible. Walters had attributed the threelis quarters to York, evidently seeing the two lis by the shield as matching the two lis by the bust on the silver coins of this mint; but they are less rare than the two-lis quarters, which he attributed to Calais, and such an arrangement is at odds with the evidence of the mint accounts which show that Calais struck some two and a half times as much gold in the 1420s as York.

In the case of the one-lis coins Whitton suggested that those with the small and large lis respectively as mintmarks were parallel series, since each included a reverse variety with an annulet (instead of the usual star) after Exaltabitur, and another with a star punched over an annulet; and that the coins with the large lis mintmark, being the commoner, should belong to London. Whitton also took the three-lis quarters (with large mintmarks) to be of Calais, and drew attention to the fact that one of them (W. Calais 2) had the DEI reading as on the coins with small lis mintmark. Noting that there was a change of type on the larger Calais gold (the C in the central panel of the reverse being replaced by an h, as normal throughout at London), he thought the changes of type on the quarters and on the nobles and halves might have taken place at the same time.

Whitton was, however, clearly uneasy about his arrangement, in particular because of the existence of a mule4 between an annulet reverse die with the small lis mintmark (and star over annulet after Exaltabitur) and an obverse of the preceding issue (described by Brooke as the last issue of Henry V, class IX or G), in which the Calais mint did not participate. Under his scheme this could only be explained as a London/Calais mule. But although mules between the mints do occur in the annulet silver coinage, they are extremely rare and exceptional, and do not offer a very natural explanation of the G/annulet quarter-noble. G/annulet mules are also found among nobles and half-nobles, and in both these cases the annulet reverse dies have h in the central panel and are undoubtedly early London dies. The Calais mint was not in operation at the point of transition between class G and the annulet issue. Thus the most obvious interpretation of the G/annulet quarter-noble is that it is a normal London mule like the comparable noble and half. In that case, the London annulet series would have begun with the rare one-lis quarter-nobles with the small lis mintmark.

In the light of this, I should be inclined to attribute all the quarters with the small lis mintmark to London, but. bearing in mind that the large lis occurs on all quarternobles of the rosette coinage, to see the size of the lis as having significance for chronology rather than mint attribution. One advantage of doing this is to identify an early type of annulet quarter-noble confined to London, in the same way that there are early annulet nobles and halves of London with an arrangement of the ornaments on the ship's side (lion, 2 lis, lion, lis) that is not replicated at Calais. A similar situation can also be observed in the annulet silver series, where the earliest variety of groat is

Lockett lot 1443.

<sup>&</sup>lt;sup>1</sup> C.A. Whitton, 'The Heavy Coinage of Henry VI', BNJ 23 (1938-40), 59-90, 205-67 and 399-437 (at pp. 72-5 and 83-4).

The figures for gold coined at this period are conveniently summarised by P. Woodhead in SCBI 47 (Schneider Collection).

p. 31.

F.A. Walters, 'The Gold Coinage of the Reign of Henry VI', NC (1903) 286-310 (at p. 300).

only found of London; and again, in the halfgroats, there are G/annulet London mules. The Calais mint accounts do not begin until August 1422, but London was minting actively before this date and it is likely that it was already doing so with annulet dies before the Calais mint reopened. (Incidentally, although the bulk of the annulet coinage belongs to Henry VI, it must have begun in the last weeks or months of the reign of Henry V, who died in September 1422 after coinage at Calais had been resumed.)

The Whitton attribution to London of the one-lis quarters with the large lis mintmark is corroborated by the existence of some examples with a trefoil or pellet below the shield. These are evidently cognate with London nobles and halves with a trefoil or pellet by the lion in the upper right quarter of the reverse. No such marks are found on the larger Calais gold.

Although Whitton's reasons for attributing the three-lis quarters to Calais are not very obvious from his text, the two lis beside the shield may be seen as equivalent to the two annulets beside the bust which differentiate the obverses of Calais silver from those of London. He also tentatively attributed to Calais a rare early quarter-noble of the rosette issue with two rosettes beside the shield - an arrangement which would be a natural progression from the two lis by the shield on annulet quarters if these are correctly assigned to Calais.5 This attribution, Whitton argued, seems to be supported by the existence of a rosette/pinecone mule quarter-noble, the obverse of which, without rosettes, presumably belongs to London since Calais had ceased to mint gold before the pinecone series. Unfortunately, the effect of this argument is much diminished by Schneider's observation6 that the reverse die of the 'Calais' quarter-noble illustrated on Whitton's plate is the same as that of Bruun lot 426 (W. 6a), a coin with no rosettes by the shield. If the latter is a London coin, to maintain the attribution of the former to Calais requires some such assumption as that dies were returned to London when Calais ceased to coin gold and the (undifferentiated) reverse then reused at the Tower. Some reservation must therefore be placed upon this view, and the possibility considered that the quarter-noble with rosettes by the shield (the only occurrence of this denomination without a mascle on either side) is simply an early (London) issue parallel with the rare unmascled varieties of other denominations.

There remains Whitton's point about reverse dies with annulet or star over annulet occurring with both the small and the large lis mintmark. An alternative to his explanation of parallel issues from two mints could be that the annulet after EXALTABITUR is the result of repeated error. Die-sinkers at this period not infrequently made errors of various kinds, and sometimes corrected them. For example, an early annulet London noble (W. 2a) has HIB altered to HYB; another (W. 11) has a trefoil instead of the normal lis after HENRIC. London half-nobles exist with the annulet by the wrist or in the upper right spandrel on the reverse omitted (W. 3c, 5). A three-lis quarter-noble (W. Calais 5) has a lis after DI (corrected to a trefoil) and another (W. 4) has an (uncorrected) annulet in the same position. At different points in the silver series there are Calais groats (W. 4b, 7b, 13b) and halfgroats (W. 12c, 13c) from reverse dies omitting the annulets between the pellets. Rosette-mascle nobles sometimes have a mascle over a rosette after PER (W. London 16d and Calais 16a) or the rosette after GRA altered in the same way (W. London 17a). Mascles over rosettes also occur on a London halfnoble (W. 6a) which shows DRA corrected to GRA. Other instances could be cited. While Whitton's interpretation is not on the face of it unreasonable, there are therefore other possibilities, less far fetched, to my mind, than having to assume that the G/annulet quarter-noble, unlike the equivalent mules in other denominations, is not only a mule between issues but also a mule between mints, one of which was not in operation at the time. I would thus prefer to transfer the one-lis quarters with the small lis mintmark from Calais to London. This would result in the following arrangement:

Henry V, class G (mm. pierced cross), London only, one lis above shield.

Early annulet issue, London only (before reopening of Calais mint): One lis above shield. Small lis mm. Also muled with obv. of class G.

Main annulet issue: large lis mm.

London, one lis above shield.

Calais, one lis above, and one each side of, shield.

York, two lis above shield.

Mhitton, as in n. 1, pp. 212 and 232-3.

See Schneider Sylloge, no. 313.

# THE PEMBROKE COLLEGE, CAMBRIDGE HOARD OF TUDOR AND STUART GOLD COINS<sup>1</sup>

### MARTIN ALLEN

FORTY-ONE Tudor and Stuart gold coins were found in 1874 and 1875 by workmen demolishing buildings in the Old Court of Pembroke College, Cambridge. After discovery the coins were placed in three envelopes, and descriptions were written on the envelopes. The first envelope contained twenty-one coins 'found in pulling down old Turret Staircase, 1874'. The second envelope had four coins 'found in old Hall, April 15, 1875', and the third had sixteen coins 'found also April 15/75 in ruins of Hall'.2 The turret staircase was at the south-eastern corner of Old Court, between the Master's Lodge and the Hall, giving access to the Hall (Figs 1 and 2). These buildings were late medieval with later alterations; notably, the wainscoting of the Hall in 1634, which blocked an entrance to the turret staircase, and a major restoration of the Hall completed in 1862. The discovery of 1874 must have been made during the demolition of the Master's Lodge and the rest of the southern side of Old Court, ordered on 13 July 1874, which exposed the walls that the Hall had shared with the demolished buildings. The Master and Fellows agreed to the demolition of the Hall on 16 March 1875, and the work began immediately.3 The discoveries of 15 April 1875 may have been made in the demolition debris of a part of the turret staircase that remained attached to the Hall after the demolitions of 1874. The finders received rewards of 22s. 6d., 15s. and 50s. for the three parcels.4 In 1943 W.L. Raynes compiled a detailed typescript list of the coins, and he presented a cabinet for them to the College.5 The removal of the coins from the original envelopes to display the finds in the cabinet prevents any comparison of the parcels of 1874 and 1875, to confirm that they came from the same hoard, but this seems to be a reasonable inference. Analysis of the coins will show that they can be interpreted as one hoard, probably concealed in the 1640s. The College deposited the coins on loan at the Fitzwilliam Museum, Cambridge in 1958, where they are available for study.

The hoard consists of coins of Edward VI, James I and Charles I, with a face value of £35 7s. 9d. in the reign of Charles I. The coins are all from the Tower mint, and the

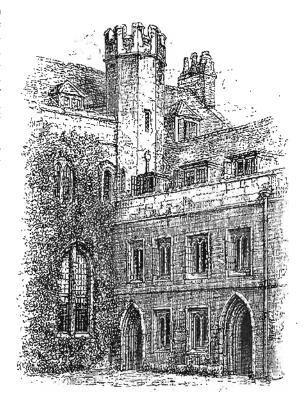


Fig. 1 The turret staircase in Old Court, with parts of the Hall and the Master's Lodge (Willis and Clark, as n. 3, i, p. 130).

latest is a ten shilling piece with the Star privy mark (1640-1). Edward Besly's inventory of hoards deposited in the period 1625-60 includes eight finds of gold, and seventeen of gold and silver, that are known to have closed with coins minted between the introduction of the

Acknowledgements: The hoard is published by kind permission of the Governing Body of Pembroke College, Cambridge. Dr A.V. Grimstone, President of the College, and the College Archivist, Miss J.S. Ringrose, have been most helpful in answering enquiries about the hoard. Miss Ringrose, Dr Mark Blackburn and Mr Edward Besly have read drafts of this note and offered invaluable comments and advice.

<sup>&</sup>lt;sup>2</sup> The College preserved the envelopes and other documentation relating to the hoard with the coins, and they are now in the Fitzwilliam Museum.

<sup>&</sup>lt;sup>3</sup> R. Willis, The Architectural History of the University of Cambridge, and of the Colleges of Cambridge and Eton, ed. J.W. Clark (4 vols, Cambridge, 1886), I, pp. 128-43, 148-53. 'The Old Hall and the Old Library', Pembroke College Annual Gazette 6 (1932), 8-23, at pp. 9-17. A. Attwater, Pembroke College Cambridge: A Short History, ed. S.C. Roberts (Cambridge, 1936), pp. 71, 94, 119. Pembroke College Cambridge: A Celebration, ed. A.V. Grimstone (Cambridge, 1997), pp. 17-18, 20, 23, 81, 111-14.

<sup>&</sup>lt;sup>4</sup> The rewards were noted on the three envelopes, not by the same hand as the descriptions of the discoveries. Pembroke College Treasury Audit Book 1860–88 (Mα 10) Accounts 1875–6 'To Michaelmas 1875 – Repairs of the Estates – The College', records the total payment of £4 7s. 6d., without providing information about the circumstances of the discoveries or the identities of the finders.

<sup>&</sup>lt;sup>5</sup> A letter from Raynes to the Master of the College, dated 2 May 1943, enclosed the list and offered the cabinet. Raynes had placed the coins in numbered envelopes as a temporary measure, and promised tickets to be kept with the coins in the cabinet.

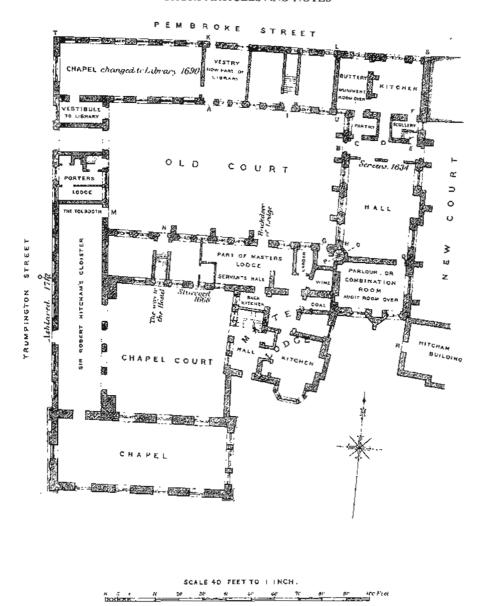


Fig. 2 Pembroke College before the demolition of buildings in Old Court (Willis and Clark, as n. 3, iii, plan 7).

Star privy mark in 1640 and 1660.6 Two further mixed hoards of gold and silver have been published since the appearance of Besly's inventory, from Ryhall and Tregwynt.7 None of the hoards of 1640-60 contained gold coins earlier than the beginning of Henry VIII's Great Debasement of the coinage in 1544, but the Pembroke College hoard and three other finds had examples of the

debased issues of 1544-51.8 Five hoards had gold coins of Mary (1553-4) or Elizabeth I (1558-1603).9 The Pembroke College hoard has two Scottish coins of James VI and I: a 1602 sword-and-sceptre piece and a unit of the tenth coinage. The sword-and-sceptre piece of £6 Scots, which were made current for 10s. English on 8 April 1603, raised to 11s. on 23 November 1611, has been

<sup>&</sup>lt;sup>6</sup> E. Besly, English Civil War Hoards (British Museum Occasional Paper 51, 1987), pp. 75–115. The eight gold hoards are: Newark (Balderton Gate) (B2), Pembroke College (C4), Congleton (C5, Lambourn (C7), Reading (D23), Sowerby (E17), Catford (F6) and Southend (H13).

<sup>&</sup>lt;sup>7</sup> Ryhall: T.M.Mck. Clough and B.J. Cook, 'The Ryhall treasure trove', BNJ 58 (1988), 96–101. Tregwynt: E.M.Besley. 'A Civil War Hoard from Tregwynt, Pembrokeshire', BNJ 68 (1998), 19–36.

<sup>&</sup>lt;sup>8</sup> The hoards from Newark (Crankley point) (D19) and Tregwynt each had a crown of Henry VIII's third coinage (1544–7), and the Newark hoard also provided a halfcrown of Edward VI's coinage in the name of Henry VIII (1547–51). The Long Crendon find (L8) had a total of five half sovereigns of 1544–51, and a crown.

<sup>&</sup>lt;sup>9</sup> The Welsh Bicknor hoard (E20) provided an angel of Mary. The Breckenbrough hoard (E2) had a half pound of Elizabeth I, and the Long Crendon find contained four specimens of this denomination. There was a quarter sovereign of Elizabeth in the Newark (Crankley Point) hoard.

found in four other hoards: Botley (Besly hoard Al), Horncastle (A3), St Annes (E16) and Tregwynt. Three further hoards have had units of £12 Scots, which were current alongside the contemporary English unite: Muckleford (A4), Childrey Manor (B1) and Breckenbrough (E2). The hoards of 1640–60 have no gold coins of James I's short-lived first English coinage (1603–4). The coins of 1604–40 are summarised in Tables 1 and 2, treating the Pembroke College hoard and

the relatively large numbers of coins from Long Crendon (L8) and Southend (H13) separately. The Pembroke College hoard seems to have an abnormally large number of coins of James I's second coinage of 1604–19, possibly from savings. The Long Crendon hoard may also have had a savings element, contrasting with the complete exclusion of the issues of 1604–19 from the Southend find. The latest privy marks or dates are known for eighteen of the hoards of 1640–60 with both gold and silver, listed in

TABLE 1. English unites and laurels of 1604-40 in hoards of 1640-60

Hoard(s)	1604-19	1619-25	1625-40	1604–40 total
Pembroke College	20 (74%)	4 (15%)	3 (11%)	27
Long Crendon	53 (60%)	16 (18%)	19 (22%)	88
Southend	0	136 (38%)	223 (62%)	359
Other hoards	16 (11%)	51 (35%)	78 (54%)	145

TABLE 2. English gold coins of 1604-40 in hoards of 1640-60

Hoard(s)	1604-19	1619-25	1625-40	1604-40 total
Pembroke College	21(58%)	7 (19%)	8 (22%)	36
Long Crendon	79 (43%)	61 (33%)	44 (24%)	184
Southend	0	136 (38%)	223 (62%)	359
Other hoards	41(18%)	77 (34%)	108 (48%)	226

Table 3. Fifteen of the hoards in Table 3 have silver coins later than the gold, and only two hoards (Oswestry and Painswick) have gold that is later; the dates are the same in one case only. The tendency of the gold coins to have an earlier terminus post quem may be due to the generally smaller numbers of gold coins in the hoards, combined with a relative scarcity of recent gold coins available for hoarding. Besly has noted that numbers of gold coins in hoards decline from the mid 1630s, as a consequence of

falling mint output in gold.<sup>11</sup> The Pembroke College hoard could have been deposited during the period of a privy mark later than Star, as the hoards amply demonstrate. The Long Crendon hoard shows that a parcel of gold coins all minted before the Star privy mark period (1640–1) could be deposited as late as the Commonwealth (1649–60).

Although the Pembroke College hoard could have been deposited as late as the 1650s, its concealment is likely to

TABLE 3. Mixed gold and silver hoards of 1640-60

Hoard	Go	old	Silve	er
	No.	Latest	No.	Latest
Whitchurch (C10)	4	Lis (1625)	39	Star (1640-1)
Harlaxton (D12)	1	Trefoil (1613)	141	Triangle-in-Circle (1641-3)
Newark (Dl9)	17	Triangle-in-Circle (1641–3)	466	Triangle-in-Circle (1641-3)
Orston (D20)	2	Lis (1623–4)	1411+	Triangle-in-Circle (1641-3)
Painswick (D21)	34	Triangle-in-Circle (1641–3)	8	Group D (c. 1629–40) <sup>12</sup>
Ryhall	Ţ	Coronet (1607-9)	3262	Triangle-in-Circle (1641-3)
Thorpe Hall (D25)	Ţ	Trefoil (1613)	2678	Triangle-in-Circle (1641-3)
Water Orton (D28)	l	Trefoil (1613)	25	Triangle-in-Circle (1641-3)
Weston-sub-Edge (D29)	2	Trefoil (1613)	307	Triangle-in-Circle (1641-3)
Wheathampstead (D30)	8	Heart (1629-30)	24	Triangle-in-Circle (1641-3)
Breckenbrough (E2)	30	Triangle (1639-40)	1552	(P) (1643-4)
Oswestry (E12)	4	(P) (1643–4)	401	Triangle-in-Circle (1641-3)
St Annes (E16)	7	Rose (1631–2)	376	(P) (1643-4)
Welsh Bicknor (E20)	3	Trefoil (1613)	151	Triangle-in-Circle (1641–3) and 1643
Ashdon (F2)	2	Lis (1625)	1201	(R) (1644–5)
Washbrook (H16)	1	Trefoil (1613)	299	Sun (1645-6)
Tregwynt	33	Portcullis (1633-4)	467	Sceptre (1647-9)
Long Crendon (L8)	210	Tun (1637-8)	846	Commonwealth (1649-60)

<sup>&</sup>lt;sup>10</sup> C.E. Challis (ed.), A New History of the Royal Munt (Cambridge, 1992), pp. 313, 688-9 tabulates the Tower mint's output of gold in the reigns of James I and Charles I. The output from 21 May 1603 to 10 November 1604 was only £31,940, equivalent to 0.4% of the total output of 1603-40.

<sup>&</sup>lt;sup>11</sup> Besly, as in n. 6, p. 54.

<sup>&</sup>lt;sup>12</sup> The Painswick hoard had a Tower penny of group D, privy mark two pellets. The datable privy marks on group D pence are: Harp (1629–30), Portcullis (1633–4), Bell (1634–5) and Triangle (1639–40).

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have occurred during the Civil War of 1642-6, most probably between 1642 and 1644. A member of the College may have concealed the hoard, either to avoid contributing it to the king or Parliament, or for safekeeping if the war obliged him to leave the College for an indefinite period. In July 1642 John Pooley, a Fellow elected by a special royal mandate, is known to have been collecting money and plate for the king. <sup>13</sup> Many Fellows left the College to join the king before the visit of a Parliamentary commissioner. William Dowsing, on 26 December 1642, and the Master and most of the remaining Fellows were ejected by order of Parliament in March 1644. The

College remained virtually empty of Fellows and students until the following year. On 10 January 1645 a new Master was imposed by the Earl of Manchester, the Parliamentary commander of the Eastern Association, and new Fellows were also appointed. The College then enjoyed a period of relative stability until the Restoration of Charles II in 1660, interrupted by the removal of the Master and a Fellow in 1650, when they refused to take an oath of obedience to the new Commonwealth. 14

## Coin list15

### **ENGLAND**

#### Edward VI

30.

Coinage in the name of Henry VIII, 1547-51 Half sovereign Tower mint North 1865 Arrow  $5.53 \, \mathrm{g}$ Ţ 2. Martlet 5.53 g James I Second coinage, 1604-1916 2/4 North 2084 Unites Rose 9.92 g, 9.91 g 2 9.94 g 5. Grapes 1 9.92 g, 9.86 g 2 6-7. Coronet 2 8-9. Tower 9.95 g, 9.93 g 4 10-13. Trefoil 10.00 g, 9.96 g, 9.87 g, 9.85 g 3 14-16. 2/5 North 2085 9.90 g, 9.90 g, 9.89 g Cinquefoil 4 17-20.Tun 10.12 g, 9.93 g, 9.86 g, 9.83 g 21-22. Book 9.75 g, 9.66 g (plugged)<sup>17</sup> 2 23. Halfcrown 2/3North 2094 Tower l 1.23 g Third coinage (1619-25) 24. 3/2 North 2112 Spur rowel Laurels 8.99 g 1 25. North 2113 3/3 Rose  $9.00 \, g$ 1 26. North 2114  $9.05~\mathrm{g}$ 3/4 Lis 1 27. 9.05 g Trefoil П 28. North 2117 Half-laurel 3/4 Lis 4.47 g1 29. Quarter-laurels 3/2 North 2118 Thistle 2.27 g 1

North 2119

3/4

Trefoil

2.24 g

<sup>13</sup> Attwater, as in n. 3, p. 73.

<sup>&</sup>lt;sup>14</sup> Attwater, as in n. 3, pp. 73-7,

<sup>18</sup> The list is based upon: J.J. North, English Hammered Coinage, Volume 2, Edward 1 to Charles II 1272–1662 (London, 1991), pp. 141–4, 147, 152–7; J.J. North and P.J. Preston-Morley with G.C. Boon and J.P.C. Kent, The John G. Brooker Collection, Coins of Charles I. (SCBI 33, London, 1984); P. Seaby and P.F. Purvey, Coins of Scotland, Ireland & the Islands (Jersey, Guernsey, Man & Lundy) (Standard Catalogue of British Coins: London, 1984). The coins of James I are listed according to coinage and obverse bust variety (e.g. 2/4 is 2nd coinage/4th bust). The classification of the coins of Charles I is by group and bust.

<sup>&</sup>lt;sup>16</sup> The hoard provides a useful sample of nineteen weights of second coinage unites, excluding the plugged coin. The mean weight is 9.91 g, equivalent to 98.8 per cent of the standard weight. Three hoards with more than five second coinage unites analysed by Besly, Civil War Hoards, pp. 66–7 (Muckleford (A4), Newark (Crankley Point) and Breckenbrough) also have high percentages: 99.2, 98.6 and 98.1 respectively. Besly noted that the gold coins in the hoards he analysed tended to have higher proportions of the standard weight than contemporary silver coins, because their weights might be more carefully checked during transactions.

<sup>&</sup>lt;sup>17</sup> Besly, Civil War Hoards, p. 9 lists two plugged coins of James I's second coinage (a unite and a Britain crown) in the Breckenbrough hoard.

Charles !	Ι
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31	Twenty shillings	B/bust 2a	North 2147	Cross Calvary	8.99 g	l
32		C/bust 3a	North 2150	Rose (over Feathers)/Rose	9.01 g	Ţ
33		D/bust 4b	North 2153	Tun	9.05 g	1
34.	Ten shillings	A/bust 1b	North 2159	Lis	4.39 g	1
35.	_	B/bust 2b	North 2161	Castle	4.45 g	)
36.		C/bust 3a	North 2165	Rose (over Feathers)/Rose	4.50 g	1
37.		F	North 2177	Star	4.52 g	i
38.	Five shillings	B/C mule	North 2184	Rose (over Feathers)/Rose	2.22 g	1
39.	_	D/bust 4a	North 2185	Harp	2.24 g	ì

# SCOTLAND

## James VI

Eighth coinage (1601–4) 40. Sword-and-sceptre piece (£6 Scots), 1602	Seaby 5460	4.94 g	1
Tenth coinage (1609–25) 41. Unit or sceptre piece (£12 Scots)	Seaby 5464	9.80 g	l

## COIN REGISTER 1999

#### EDITED BY RICHARD ABDY

THE coin register provides a platform for the publishing of unusual/remarkable single coin finds made in Britain and Ireland and which appear to be ancient losses. All Celtic, pre-conquest Roman and Roman silver prior to AD 64, all Roman gold, any denomination of late Roman coin from the fifth century onwards (and silver from the fourth), are welcomed, as are Anglo-Saxon, Norman or Plantagenet coins and their continental contemporaries (down to and including the 'Tealby' type of Henry II). However, coins outwith these categories will still be considered on their numismatic merit.

As always 'the essential criterion for inclusion will be that the coin is new, by virtue of either being newly found or (if previously discovered) being hitherto unpublished. Single finds from excavation sites may be included, if it seems that there would otherwise be a considerable delay in publication.'

The listing of Celtic coins in the Coin Register is carried out in association with the Celtic Coin Index at the Institute of Archaeology, Oxford. Celtic material should therefore be sent in the first instance to Cathy King, c/o the Institute of Archaeology, 36 Beaumont Street, Oxford OX1 2PG. Other material should be sent to R. Abdy, Department of Coins and Medals, British Museum, London, WC1B 3DG (if practical, it would be of great help if large amounts of text could also be sent as an attachment to rabdy@british-museum.ac.uk). Potential contributors may contact either of the above or the Editor of BNJ with any queries about how to submit and set out material.

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BM CCI M/d	British Museum Celtic Coin Index Metal detector	North	tral Gaul c.200-50 BC (Oxford, 1978) J.J. North, English Hammered Coinage, Vol I. (Spink 1994)

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West Ashby, Efficientshire, 140 West Ilsley, Berkshire, 4 West Meon, Hampshire, 67 Whittonditch, Wiltshire, 14 Winchester, Hampshire, 94, 95

Wisemans Bridge, Pembrokeshire, 140 Wixford, Warwickshire, 139

Woodnesborough, Kent, 59 Worth, Kent, 7, 9, 16, 23, 102

Wrotham, Kent, 83 York, Yorkshire, 89 Celtic Coins

Note: as in previous years, large numbers of Celtic coins were again reported during 1999. The list that follows is therefore selective, concentrating on the publication and discussion of rare and new types.

1. West central Gaul, silver drachm, BN 2303, Nash fig. 64 (CCI 99.0683).

Weight: 3.81 g.

Buckingham, Buckinghamshire. M/d find.

Nash (1978, 39) records only two examples of this variety of her late Bridiers type, neither of which are provenanced.

P. de J./C.E.K.

 West central Gaul, cast bronze unit perhapsof the Bituriges Cubi, BN 6292, Nash fig. 603 (CCI 99.0686).
 Weight: 2.97g.

Great Dunmow, Essex. M/d find, 1992.

P. de J.

3. West central Gaul, bronze unit perhaps of the Arverni, BN 3951, Nash fig. 440 (CCI 99.0685).

Rev. [IIPOS] Weight: 1.75 g.

Hatfield Peverel, Essex. M/d find, 1992.

P. de J.

4. Belgic Gaul, bronze unit of the Ambiani, LT XXXIV 8526, Scheers series 122 (CCI 99.0253).

Weight: 1.97 g.

West Ilsley, near, Berkshire. M/d find, 1999.

P. de J./C.E.K.

British, stater, class LB, VA 1498–1, BMCIA 344 (CCI 99.0252).

Weight: 5.89 g.

Bradwell, Essex. M/d find, 1998.

P. de L/P.R.S.

British, stater, class LB, VA 1502–1, BMCIA 346 (CCI 99.1063).

Weight: 5.66 g.

Buxhall, Suffolk. M/d find, 1999.

P. de J./J.N.

7. British, plated stater, class LZ3, VA 1507-1, BMCIA 347 (CCI 99.0801).

Weight: 3.5 g.

Worth, Kent. M/d find, 1998.

The sixth recorded example of this type. Three are provenanced: two to Kent and one to Surrey, suggesting that their origins lie in the south Thames area.

P. de J./D.J.H.

8. British, quarter stater, class G, VA 1460-1, BMCIA 180 (CCI 99.1152).

Weight: 1.38 g.

Little Blakenham, Suffolk. M/d find, 1999.

P. de J./J.N.

9. 'Cantii', bronze unit of Dubnovellaunus, VA 180-1, *BMCIA* 2509 (CCI 99.0004).

Obv. DVBNO[V] Weight: 2.3 g.

Worth, Kent. M/d find, 1998.

10. 'Cantii', silver unit, new type (CCI 99.0680).

Obv. wreathed head r., flame-like hair above wreath, uncertain objects in front.

Rev. Pegasus r., hatched box below.

Weight: 1.06 g.

Cliffe, Kent. M/d find, 1998.

Two other examples are known. One allegedly from Essex was published by D. J. Symons, *NCirc* 98 (October 1990), p. 268 no. 4. The Pegasus and the hatched box suggest an origin in Kent.

P. de J./C.R.

11. 'Cantii', silver unit, new type (CCI 99.0799).

Obv. head r., large ear, pellet in ring motifs in front, torc around neck.

Rev. Pegasus r., pellet in ring motifs to left and right of wing.

Weight: 1.2 g.

Hollingbourne, Kent. M/d find, 1998.

This type is increasingly well-established in Kent. The obverse is closely related to the uninscribed Kentish bronze type, VA 154-9.

P. de J./D.J.H.

12. 'Atrebates', bronze unit of Eppillus, VA 453-1 (CCI 99.0013).

Obv. [EPPI C F]

Rev. EP C [F]

Weight: 2.1 g.

Minster in Thanet, Kent. M/d find, 1998.

D.J.H.

13. 'Atrebates', silver unit of Verica, VA 532-1 var., *BMCIA* 1420 var. (CCI 99.1211).

Obv. [V]IRI

Weight: 1.33 g.

Devil's Dyke, near Brighton, West Sussex. M/d find, 1986.

The third recorded example of this variation with the seated figure to the right, rather than to the left as the single example which illustrates VA 532 and BMCIA 1420. The full obverse inscription can be seen on the coin published by D.J. Symons, NCirc 98 (March 1990), p. 48 no 25

P. de J.

 Uncertain attribution, silver unit, new type (CCI 99.1999).

Obv. helmeted head L, two bands of stylized hair behind. Rev. horse L, bifurcated inner rear leg, ladder mane; lyre above, pellet in cogwheel in ring of pellets below. Weight: 0.99 g.

Whittonditch, Wiltshire. M/d find, 1999,

The obverse apparently copies the head of Roma, The clearest published parallel is provided by Chris Rudd 1997 list 27, no. 78, although there are minor variations in the subsidiary decoration. Three of the four provenanced examples in the Celtic Coin Index were found in Wiltshire, the fourth in West Sussex: some sort of association with the Atrebates seems likely despite the Wiltshire bias, since the bifurcated rear leg is strongly characteristic of their coinage, and there are other stylistic links to south Thames issues, notably the ladder mane and the lyre.

15. Uncertain attribution, silver unit, new type (CCI 99.1271).

Obv. facing male head, wearing a complex headdress; between the ?antlers is a boar standing left.

Rev. horse I., triple tail with diagonal strokes between strands of tail; lyre below, uncertain spiral motif above.

Weight: 1.00 g.

Chichester, West Sussex. M/d find.

The obverse bears some resemblance to the coin published by G.C. Boon, SCMB September 1982, pp. 276–82, also with a facing head tentatively identified as Cernunnos. The form of the horse's tail and the lyre beneath the horse are also known on other rare, southern British units, which together with the provenance suggests an origin somewhere in the territory of the Atrebates, or conceivably the Belgae, who – as Julius Caesar records – may have occupied the hinterland of the Solent in the mid-first century BC.

P. de J.

16. Uncertain attribution, silver minim (CCI 99.0003). *Obv.* plain back to back crescents, pellet in each arc, surrounded by pellet border.

Rev. uncertain beast (dog?) r., left foreleg raised, tail raised above back; pellet to each side of tail.

Weight: 0.3 g.

Worth, Kent. M/d find, 1998.

A coin of the same type was found during the excavations at Harlow temple, Essex, in 1988. The metal and denomination suggest that its origins lie in the south Thames region.

P. de J./D.J.H.

17. 'Catuvellauni', quarter stater of Addedomaros, VA 1638-1, BMCIA 2422 (CCI 99.0522).

Rev. (ADDEDO]MAROS

Weight: 1.4 g.

Braintree, near, Essex. M/d find, 1998.

M.J.C.

18. 'Catuvellauni', silver unit of Tasciovanus, VA 1796-1, BMCIA 1661 (CCI 99.0024).

Obv. VERL Rev. TAS Weight: 1.3 g.

St Neots, near, Cambridgeshire. M/d find, 1998.

DJ.H.

19. 'Catuvellauni', silver unit of Sego, VA 1851-1, BMCIA 1684 (CCI 99.0025).

Obv. SEGO Weight: 1.3 g.

Thurnham, Kent. M/d find, 1998.

D.J.H.

20. 'Dobunni', quarter stater of Corio, VA 1039-1, *BMCIA* 3134 (CCI 99.2027).

Obv. COR Weight: 0.93 g.

Alcester, Warwickshire. M/d find.

D.J.S.

21. 'Corieltauvi', stater, class M, VA 825-1, *BMCIA* 3181 (CCI 99.1584).

Weight: 5.20 g.

Ashby de la Zouch, Leicestershire. M/d find by Mr T.C. Corser, 1997.

Information kindly provided by Mr E. Danson, who obtained the following figures from an x-ray analysis on the edge of the coin: 49% gold, 40% copper, 9% silver, 2% iron. Although this appears to be the first published analysis of a class M stater, and thus there is little comparative material, the gold figure seems unusually high: a figure in the region of 30-35% would correspond to other South Ferriby staters of a similar period. It is possible that the copper element has been leached from the surface, thus providing an artificially high gold content.

P. de J.

 'Corieltauvi', stater of Avn Cost, VA 910–1, BMCIA 3258 (CCI 99.1264).

Rev. AVN [C]OST

Weight: 5.15 g.

Malton, near, North Yorkshire. M/d find.

P. de J.

23. 'Corieltauvi', plated stater of Avn Cost, VA 910-2, BMCIA 3259 (CCI 99.0030).

Rev. [AVN COST]

Weight: 3.0 g.

Worth, Kent. M/d find, 1998.

Part of the reverse legend is present, though blundered.

D.J.H.

24. 'Corieltauvi', stater of Volisios Cartivellaunos, VA 993-1 (CCI 99.0827).

Obv. VOL[IS]IO[S]

Rev. CARTIVELLAVNOS

Weight: 5.37 g.

North Yorkshire. M/d find, 1999.

The discovery of this stater fulfills the prediction of its existence made by Derek Allen in 1944. It confirms once and for all that the inscription – previously known only in partial form, from two silver half-units and two stater cores in poor condition – does not read Cartimandua, but Cartivellaunos. The stater is discussed in detail by P. de Jersey, *NCirc* 107 (September 1999), pp. 208–9.

P. de J.

25. 'Iceni', silver unit, early face/horse new type (CCI 99.2038).

Obv. bearded head 1., large oval for eye; line of pellets from forehead behind eye and ear separates face from complex corded hair. Pellet in ring to r. and l. of neck, other uncertain decoration around.

Rev. horse 1., leaf tail, bifurcated front legs; three small pellet in ring motifs and large pellet in two rings of pellets above, pellet in ring of pellets in front, pellet in ring below.

Weight: 1.2 g.

Norfolk. M/d find.

A coin probably from the same obverse die was published in Coin Register 1996, BNJ 66, no. 39. The reverse is broadly the same, but there are differences in the large motif above the horse and the form of the horse's ears. In both cases the parallels with more regular types of early Icenian silver are very clear.

P. de J.

Roman Coins

26. Republic, denarius of Sextus Pompeius, 137 BC, Crawford 235/1.

Weight 3.40 g. Die-axis 290°.

Pershore, Worcestershire. M/d find by Mr D. Crawford. Bankers marks on Roma's helmet and face on the obverse and above the wolf on the reverse.

D.J.S./A.B.

27. Republic, denarius of Claudius Pulcher, 110 or 109 BC. Crawford 300/1.

Weight 3.33 g. Die-axis 270°.

Sutton Colefield, West Midlands, M/d find by Mr M. Miles. There is a banker's mark on the obverse on the cheek,

D.J.S./A.B.

28. Republic, denarius of Marcus Scaurus and Publius Hypsaeus, 58 BC, Crawford 422/1b.

Weight 2.95 g. Die-axis 180°.

Arley, Warwickshire. M/d find by Mr Chester.

D.J.S./A.B.

29. Republic, denarius of M. Junius Brutus, 54 BC, Crawford 433/1.

Weight 2.83 g (fragment).

Alcester, Warwickshire. M/d find, April 1999, by Mr R. Laight.

D.J.S./A.B.

30. Octavian, denarius, 36 BC, Crawford 540/2.

Obv. [IMP CAE]SAR DIVI F III VIR [ITER R P C]. (Head bare r.). Rev. [COS !TER ET TE]R DESIG / [DIVO IVL] on pediment. (Temple of Divus Julius).

Weight etc. not recorded.

Haddenham, Buckinghamshire. M/d find (Mr W. Jackman), May 1999.

R.A.A.

31. Civil Wars 68–9 denarius, RIC<sup>2</sup> 51. Gaul.

Obv. MARS VLTOR. (Helmeted bust of Mars r.).

Rev. P.R. in field. SIGNA in ex. (Fagle, standards at

 $\it Rev.$  P R in field. SIGNA in ex. (Eagle, standards and altar.) Weight 2.70 g. Die-axis 180°.

Norfolk, M/d find, 1999. Information from Katie Hinds, Norfolk Archaeology & Environment Division.

An example of the rare series of 'Republican' looking revolt coinage of 68-9.

R.A.A.

32. Clodius Albinus (as Augustus), denarius, RIC 23, Lyons mint.

Obv. IMP CAE(S D CLO) ALBIN AVG. (Laur. hd. r.). Rev. [GEN] LVG COS II (Genius of Lugdunum.)

Weight 2.01 g (broken). Die-axis 180°.

Nr. Sudbury, Suffolk, M/d find, 1999.

Coin of Albinus's revolt against Septimius Severus (195-7). Of the 9,000+ Late Severan denarius hoard from Shapwick, Somerset (1998), not a single example of this rare type is present.

R.A.A.

33. Gallienus (253-68), base-silver ?radiate. Obv. [?IMP GALL]IENVS GER[M]. (Janiform bust). Rev. ROMA below in incuse. (Figure in quadriga)

Weight 1.72 g (broken). Die-axis 0°.

Near Hitchin, Herts. M/d find by Mr T. Roche, 1999.

This amazing coin is a new and unique example of Gallienus's more innovative types. Modified from the well known third-century BC series of Janus/Jupiter in quadriga didrachms (Crawford 29), the obverse carries the features of Gallienus as a Janiform portrait, that is two heads joined at the back. This tradition has featured on coins of Sextus Pompey (c.45 BC) and medals of Commodus (180-92), but is unknown on those of Gallienus. The Janus head had been a traditional type on the bronze as until virtually the end of the Republic, but the quadrigatus type itself ceased circulation c.211 BC, replaced by the first denarii. Although it saw a brief and very rare revival in Trajan's restored series c.107, it is still astonishing to think that it should mimic a half-millennium-old prototype: these two coin types come from virtually the opposite ends of Roman numismatic history. The British Museum has acquired this find (BM 2000 4-2 1).

R.A.A.

34. 'Postumus', irregular radiate, copy of RIC 64.

Obv. [ ]MVS P F AVG

Rev. HERC DEV [ ].

Weight not recorded.

Great Witely, Worcestershire. M/d find by Mr Rowley.

D.J.S./A.B.

35. Aurelian, tetradrachm (274–5), Copenhagen 883. Obv. AKAAOMAVTIHAIANOCCEB. (Laur. cuir. bust r.).

Rev. €TOVC S (eagle)

Weight 7.91 g. Die-axis 0°.

Cooling, Kent. M/d find, 1999

Unusually, this tetradrachm appears to be an ancient loss – judging by its condition. Found in a field which also yielded more typical Roman coin finds by Mr Keith Brown, who kindly donated this piece to the British Museum.

R.A.A.

36. Carausius (AD 287–96), laureate bronze, as *RIC* 554. *Obv.* IMP CARAVSIVS P F AVG. (Laur. dr. cuir. bust r.). *Rev.* [EXPE]CTATE VEN[I]/?[RSR] in ex. Female figure

greeting Carausius.

South of England. Weight 3.08 g. Die-axis 180°. Information from Simon Holmes 1999.

R.B.

37. Valentinian II (375-92), silver siliqua, mint of Trier, RIC 43.

Obv. D N VALEN[TINIANV]S IVN P F AVG. (Diad. dr. cuir. bust r.).

Rev. VICTORIA AVGG / TRPS in ex. (Victory adv. I.).

Weight etc. not recorded.

Haddenham, Buckinghamshire. M/d find (Mr W. Jackman), May 1999.

R.A.A.

38. Valentinian II (375-92), gold solidus, mint of Trier, *RIC* 90a.

Obv. D N VALENTINIANVS P F AVG. (Diad. dr. cuir. bust r.). Rev. VICTORIA AVGG / T R//COM (two enthroned emperors). Weight 4.41. Die-axis 180°.

Hampshire or Berkshire, M/d find by Mr M. Parker, 1999.

R.B.

39. Theodosius I (379-95), gold solidus, mint of Milan RIC 8h

Rev. VICTO[RIA AVGG] / M [D]// COM (two enthroned emperors).

Weight 2.30 g (cut portion). Die-axis 180°.

Near Irby-upon-Humber, Humberside. M/d find by Mrs A. Wright, 1998.

The coin shows little circulation wear but has suffered two almost straight cuts, approximately at right-angles to each other with a crimping parallel to one cut. A metallurgist considers the cuts to have been made by shears.

E.W.D.

40. Theodosius I (379–95), gold solidus, mint of Constantinople *RIC* 45d (off. B).

Obv. D N THEODOSIVS P F AVG. Diad. dr. cuir, bust r.

Rev. CONCORDIA AVGGG B / CONOB in ex. (Constantinopolis std. r.).

Weight 4.45 g. Die-axis 170°.

Hampshire or Berkshire. M/d find by Mr A. Parker. 1999.

RR

#### Pseudo-Imperial Gallic

41. 'Attributed to the Visigoths', 2nd series (c.439-55), gold solidus, *RIC X* 3716.

Obv. (all within traces of wreath border) D N PLA VALENTI-NIANVS P F AVG (Bust of Valentinian III dr. cuir. & diad. r., small wreath above).

Rev. (within pellet border) VICTORI-AVGGGR V//COMO8 (Emperor stg. facing holding long cross and Victory on globe, r. foot on human-headed coiled serpent).

Weight 4.11 g, Folded in antiquity.

Higham, Kent. M/d find by Mr. M.P. Wells. 31/1/99. Information from Claire Mason, Maidstone Museum.

R.A.A.

#### Merovingian coins

42. Gold tremissis, Quentovic, moneyer Dutta (Lafaurie IXb, 73-82), c.630-70

Obv. + [VI]CCO, elongated bust (hardly distinguishable). Rev. DVTTA M[ON], cross on steps.

Weight: 1.28 g (19.7 gr).

Holme next the Sea, Norfolk. M/d find by Peter Macken, November 1999.

[1999.0180]1

Very probably same dies as Lafaurie 81.

S.M. Pennies (Sceattas)

43. Silver denier, uncertain mint and moneyer, c.675-750

Obv. Large chevron-barred A, with cross on top, a large annulet at the base of both descenders.

Rev. Cross botonnee, with a cross saltire superimposed; in centre, an annulet. Weight: 0.88 g (13.5 gr), chipped.

Oxborough, Norfolk. M/d find, 1999. Information from Paul Murawski.

[1999.0143]

A close parallel has not been found, but Belfort lists several types (5692-5705) of Merovingian deniers with a

large A surmounted by a cross on the obverse, and sometimes a simple geometric pattern on the reverse.

M.A.S.B.

44. Silver denier, uncertain moneyer, probably mint of Paris, c.700-750

Obv. Diademed bust right, with blundered legend.

Rev. Debased cross ancrée

Weight: 1.06 g. Die axis 180°.

Congham Norfolk, M/d find by J. Wells.

It has not been possible to find an exact parallel, but Belfort and Prou both list several examples of comparable coins attributed to Paris. Some of these are legible, others not, and from the comparative crudity of this particular coin, it probably falls comparatively late within the type. It may alternatively represent an imitation of a Paris coin produced elsewhere.

G.W.

#### Shillings

45. Shilling ('thrymsa'), 'Witmen' type (Crondall phase). North 25var c.620-40.

Obv. Crude diad. bust r., 'candelabrum' in front.

Rev. Large cross fourchée within crudely pelleted circle, pseudo-legend around. One arm of cross hooks on to the circle.

Weight 1.3 g. Dia. 10.9-11.25 mm.

Near Sellindge, Kent. M/d find Aug. 1999.

D.J.H.

46. Shilling ('thrymsa'), Varimundus type, Series Va BII, c. 670

Obv. OS[ ]VS helmeted bust right; note annulet on neck and three annulets on tunic right.

Rev. + TMVSD[]X, small cross in double beaded inner circle.

Weight: 1.23 g (19.0 gr), pale gold, broken, pierced twice, with remains of base (copper alloy?) loop attached. Die-axis: 90°. Soham, Cambridgeshire. M/d find, 1999. Information from Andrew Rogerson.

The coin has been used as a pendant, and could have come from a disturbed grave. It may have been deposited/lost one or even two generations after it was made.

[1999.0094]

M.A.S.B.

, , ,

47. Penny (sceat), Series A, Rigold A2, Type 2a, Kent, c. 680–700 (imitative?)

Obv. Crowned bust right.

Rev. TT/o/II standard.

Weight: 1.10 g (16.9 gr), corroded. Die-axis: 40°.

Badlingham, Cambs. M/d find by Dave Pooley, January 1999. Information from Gabor Thomas.

The coin looks like an imitation of type A2 (the row of pellets along the hairline all the way to the back of the head identifies it as A2, but the absence of an annulet behind the crown, the poorly-executed face, and the

<sup>&</sup>lt;sup>1</sup> The Early Medieval Coin index number is indicated by square brackets.

impression of a pyramidal neck meeting the back of the head suggest it is not a genuine type A2). The dies are not illustrated in Rigold 1960 or Metcalf, *Thrymsas and Sceattas*.

[1999.0034]

S.M.

48. Penny (sceat), Series BIA, late 7th century. Obv. Diademed head right.

Rev. Bird on cross, rings at end of horizon arms. Weight 1.2 g.

Thurnham, Kent. M/d find Mar. 1999.

D.J.H.

49. Penny (sceat), Series BIA, late 7th century. Obv. Diademed head right.

Rev. Bird on cross, rings at end of horizon arms.

Weight etc not recorded.

Ringwould/Ripple area, Kent. M/d find (Mr J. Hudo) at Metal Detector Trade Assoc. rally, ref. MDTA-98-294.

D.J.H.

50. Penny (sceat), Series B, Rigold BIc, Type 27b, North 126, *c*.690-700

Obv. []VAIIVAI, bust breaking inner circle, with three pellets before forehead.

Rev. [ ]VAIIAVoo, bird on Latin cross potent, with two annulets and two pellets in field.

Weight: 1.24 g (19.1 gr). Die-axis: 180°.

Bawsey, Norfolk. Time Team excavation, August 1998 [1998.0095]

M.A.S.B.

51. Penny (sceat), Series BIC, late 7th century. Obv. Diademed head right.

Rev. Bird on cross, rings to left and right.

Weight 1.1 g. Die-axis 210°.

Preston, Kent. M/d find 1999.

?Imitative.

D.J.H.

52. Penny (sceat), Series B, Rigold BII, Type 27b, North 127, ? Kent, c.700-10

Obv. Head right, with cross in front of face.

Rev. Bird left, on cross, with pellets either side of cross.

Weight: 1.03 g (15.8 gr), chipped and corroded.

Ely, near, Cambridgeshire. M/d find by Mark Frost, 1999. [1999.0144]

Same dies as CR 1990: 169; same obverse die as BMC 124.

S.M.

53. Penny (sceat), Series C, Metcalf C2, Blackburn C, Kent, c.700-10

Obv. Crowned bust right, with A behind head and æpa in runes before.

Rev. TT/o/II standard. Weight: 1.20 g (18.5 gr).

Linton, near, Cambridgeshire. M/d find by John Barker, February 1992.

[1999.0022]

Same site as 1999.0025.

S.M.

54. Penny (sceat), Series C, Metcalf R2, Blackburn D, Rigold R1x, Kent, c.705-10

Obv. Crowned bust right, with A behind head and epa in runes before.

Rev. TT/o/II standard.

Weight: 1.15 g (17.7 gr).Linton, near, Cambridgeshire. M/d find by John Barker, September 1996.

[1999.0023]

Same site as 1999.0024, 1999.0030.

S.M.

55. Penny (sceat), Series D, Type 2c, North 163, Lower Rhineland, c.700-10

Obv. crowned bust right, with pseudo-runic inscription before face.

Rev. pseudo-inscription, cross and four pellets.

Weight: 1.16 g (17.9 gr). Die-axis: 180° (with rev. cross at top).

Bawsey, Norfolk. Time Team excavation, August 1998 M.A.S.B.

[1998.0094]

S.M.

56. Penny (sceat), Series D, Type 2c, North 163, Lower Rhineland, c.700-10

Obv. Crowned bust right, pseudo-runic inscription before face.

Rev. Cross and four pellets. Weight: 1.23 g (18.9 gr).

Linton, near, Cambridgeshire. M/d find by John Barker, November 1995.

[1999.0024]

Same site as 1999.0022, 1999.0030.

S.M.

57. Penny (sceat), Series D. Type 2c, North 163, Lower Rhineland, c.700-10

Obv. Crowned bust right, æpa in runes before face.

Rev. Cross and four pellets. Weight: 1.3 g (20 gr).

Lolworth, near, Cambridgeshire. M/d find by T. Jackson, August 1999.

[1999.0146]

S.M.

58. Penny (sceat), Series D, Type 2c, North 163, Lower Rhineland, c.700-10

Obv. Crowned bust right, pseudo-runic inscription before face.

Rev. Pseudo-inscription, cross and four pellets.

Weight: 1.1 g (16.9 gr). Die-axis: 90.

Papworth, near, Cambridgeshire. M/d find, February 1999. Information from Paul Murawski.

[1999.0033]

S.M.

59. Penny (sceat), Series D, type 8Z, c.700-15.

Obv. Cross surrounded by pellets.

Rev. Degraded standard.

Weight 1.1 g. Dia. 10.7-11.15 mm.

Woodnesborough, Kent. M/d find Oct. 1999.

D.J.H.

60. Penny (sceat), Series D, uncertain type, Continental, c.700-15

Obv. worn almost smooth.

Rev. Cross and four pellets.

Weight: 0.78 g (12 gr), very worn.

Linton, near, Cambridgeshire, M/d find by John Barker,

November 1994.[1999.0025] Same site as 1999.0022.

S.M.

61. Penny (sceat), Series E, Variety G4, Type 4, North 45, Continental, c.710-15

Obv. Porcupine, with legend ending [ Z]O below.

Rev. Standard with four dashes in corners.

Weight: 1.2 g (18.5 gr).

Coddenham, Suffolk. M/d find, 1999. Information from Chris Gander.

[1999.0093]

S.M.

62. Penny (sceat), Series E, G4, early-mid 8th century. Cf. North 48.

Obv. 'Porcupine' r.

Rev. Standard.

Weight 0.6 g. Dia. 10.5-10.8 mm.

Near Cliffe, Kent. M/d find Aug. 1998

Very debased (coppery) and very worn.

D.J.H.

63. Penny (sceat), Series E, Secondary, Type 4, Continental, c.715-50

Obv. Porcupine.

Rev. Standard with four dots in corners and an annulet in the middle.

Weight: 1.08 g (16.6 gr).

Little Thurlow, Suffolk. M/d find by Robert Spall, 1999. [1999.0172]

S.M.

64. Penny (sceat), Series E. Secondary, Type 4, Continental, c.715-50

Obv. Porcupine.

Rev. TT/o/II standard.

Weight: 1.03 g (15.8 gr).

Holme next the Sea, Norfolk. M/d find, November 1999.

Information from Roy Davis.

[1999.0182]

S.M.

65. Penny (sceat), Series F, Type 24. possibly Middle Anglian, c.700

Obv. Diademed bust right, with blundered inscription around

Rev. Small cross and annulets, heavily worn and largely obscured.

Weight: 0.78 g

Bunny, South Nottinghamshire. M/D find, shown at the BM, Summer 1999.

The coin is fragmentary, and in very poor condition.

G.W.

66. Penny (sceat), Series K, Type 20, Kent, c.720-40 Obv. Bust right, holding cup before face, with cross over cup

Rev. Figure standing on boat-like curve, holding cross and hawk.

Weight: 0.99g Die axis: 30°.

National Portrait Gallery excavations, London 1997. Shown at the BM, 1999

67. Penny (sceat), Series K, Type 33, North 93, East Kent, c.720-40

Obv. Bust right with cross before face.

Rev. Wolf's head right, with tongue curling below chin. Weight: 1.06 g (16.3 gr). West Meon, Hampshire. M/d find by Larry Bunyan, August 1999.

[1999.0145]

S.M.

68. Penny (sceat), Series L, type 14 var., London region, c.730

Obv. AINO[ ]O (A without crossbar) (? DE LONDONIA retrograde and blundered), diademed bust left.

Rev. Celtic cross formed of four rosettes, with a large central pellet and small pellets in each angle.

Weight: 0.99 g (15.2 gr).

Bluntisham, Cambridgeshire. M/d find by Jack Nash, December 1999.

[1999.0193]

S.M.

69. Penny (sceat), Series N (Type 41b), southern English (? London), c.715-20

Obv. Two standing figures.

Rev. Monster left with head right.

Weight: 1.08 g (16.6 gr).Litlington, near Bassingbourn, Cambridgeshire, M/d find by Bob Moore, 1999. [1999.0162]

S.M.

70. Penny (sceat), Series N, type 41b, c.725-50.

Obv. Two standing facing figs. Holding three crosses.

Rev. Monster I., head turned to r.

Weight 1.2 g. Die-axis 180°. Dia. 11.35-12.20 mm.

Aldington, Kent. M/d find Sept. 1999.

D.J.H.

71. Penny (sceat), Series N. type 41b, southern English (? London), c.720-50

Oby. Two standing figures, facing, holding three crosses Rev. Monster left, with head right

Weight: 1,14 g. Die axis 150°.

Edge of Redbourne, Herts. Shown at the BM, 5.11.1999.

G.W.

Penny (sceat), Series Q.

Obv. bird left, triple-tailed with upward-curving wings. Cross in front, eight pellets in field.

Rev. quadruped left, head turned right, divided tail curves upwards and downwards. 17 pellets in field.

Weight 1.05g. Die-axis 120°.

Near Grimsby, Humberside. M/d find by D. A. Wright, 1998. (Not illustrated).

E.W.D.

73. Penny (sceat), Series R: Metcalf R8: Blackburn I, East Anglia, c.730-50

Obv. Simplified bust left.

Rev. Standard.Weight: 0.77 g (11.8 gr), Mickfield, Suffolk. M/d find, 1999. Information from John Newman. [1999.0158]

S.M.

74. Penny (sceat), Series V: North 120: c.720-30. *Obv.* Wolf and twins.

G.W.

Rev. Bird in vine.

Weight 1.1 g. Die-axis 180°. Dia. 11.75-12.85 mm.

Thurnham, Kent. M/d find Aug.1999.

Some debasement evident.

D.J.H.

Islamic

75. Silver Samanid dirhem of Ismail b Ahmad, mint of al-Shash, dated AH 283 (AD 896/7)

Weight: 2.49 g (38.4 gr).Stowmarket, near, Suffolk. M/d find by Mark Frost, 1999. Identified by Stephen Album. [1999.0138]

S.M.

Later Anglo-Saxon Coins

76. Kent, anonymous regal issue c.822-3, North 221, Canterbury, moneyer Oba.

Obv. +OBA[]A

Rev. [ ]OROB [ ]RNIAC [ ] (three-line legend).

Weight 0.76 g (fragments broken off). Die-axis 270° (from initial cross).

Near Grimsby, Humberside. M/d find by D. A. Wright, 1999. Probably from the same obverse die as North Pl. II.44 but from a different reverse die. (Not illustrated).

E.W.D.

77. Offa of Mercia, new variant of Blunt 44, North —, London, moneyer Ealhmund

Obv. + OFFA REX +

Rev. + E / AL / MV / ND (MV ligatured)

Weight: 1.1 g (16.9 gr). Die-axis: 150.

Kelvedon, near, Essex. M/d find by Roy Davis, 1999. [1999.0076]

The obverse is similar to the obverse of CEB 23 (similar lettering and drapery, but different hair), but the reverse seems to be the first known example of its type. Derek Chick would class this as L(L) 19a, that is to say Light Phase (London mint), a variant of Chick type 19, which is Blunt type 44.

S.N

78. Offa of Mercia, Group II, Blunt 53, North 286, Canterbury, moneyer Æthelnoth c.787-92.

 $\mathit{Obv}.$  OFFA / REX, in two lunettes, divided by a line with a cross at each end.

Rev. EPEL / NOP, in two lines, divided by a beaded line with forked ends.

Weight: 1.19 g. Die-axis: 180°.

Layer-de-la-Haye, Essex. M/d find by Mr L. Sadler, November 1998. Acquired by the Colchester Museum. (1999.53)

[1999.0075]

S.M./P.J.W.

79. Offa of Mercia, Group II, Blunt 76, North 302, London, moneyer Pendræd

Obv. OFFA / REX

Rev. + P / EN / dR / ED (first d uncial)

Weight: 1.15 g (17.7 gr), corroded.Akenham, Suffolk. M/d find, 1999. Information from John Newman. [1999.0035]

cf. CR 1996: 166 and Blunt 76 and SCBI 2: 316

80. Offa of Mercia, Blunt —, North 334/1, East Anglian mint, moneyer Ecgbeald

Obv. OF / FA / RE / X

Rev. ecbald (runic)

Weight and die-axis not recorded.

Holme next the Sea, Norfolk. M/d find, March 1999. Information Roy Davis.

[1999.0131]

Same dies as CR 1993: 192 and another unpublished coin found near Louth in 1999; all three struck at about the same time according to Derek Chick.

S.M.

81. Offa of Mercia, Blunt —, new type, London, moneyer Dud

Obv. + OFFA [R ]ER, diademed bust right.

Rev. + DVd, in cartouche, with serpent-shapes above and below.

Weight and die-axis not recorded; fragment.

Waldershare Park, near Dover, Kent. M/d find by Jeremy de Montfalcon, 31 August 1996.

[1999.0137]

The reverse of this coin is of a similar design to that on an unpublished East Anglian coin of Lul (with Lul in runes), found at Akenham in 1996. Derek Chick thinks the London coin is earlier.

S.M.

82. Æthelheard, Archbishop of Canterbury (793–805), Intermediate issue, without king's name, North 231/1, Canterbury, moneyer Eadgar, probably 796–8

Obv + AE[ ]D A-R (EP--)

Rev. EA / [ ] / R

Weight: 0.77 g (11.8 gr), fragment.Kent. M/d find, 1998. Acquired by the Fitzwilliam Museum (CM.108–1999). [1999.0069]

S.M.

83. Coenwulf, Mercia, penny, issue of c.796–8 (group I), North 342, Canterbury, Sigeberht.

Obv. +COENV[VL]F REX

Rev. +SIG EBE R[HT] Tribach moline.

Weight 1.0 g (incomplete). Die-axis not recorded.

Wrotham, Kent. M/d find Mar. 1998.

Same reverse die as *SCBI* 9, 1124, but different obverse. This new find may be useful in verifying the Ashmolean coin as genuine as the die is otherwise unrecorded (info. D. Chick).

DJ,H.

84. Coenwulf of Mercia (796–821), Tribrach type, BLS Cn. 9, North 342, Canterbury, moneyer Eoba, 798-c.802 *Obv.* []F RE[]

Rev. [] / OB / []

Weight: 0.35 g (5.4 gr), fragment.

Holme next the Sea, Norfolk, M/d find, November 1999. Information from Roy Davis. Donated by the finder to the Fitzwilliam Museum (CM.7–2000).

[1999.0181]

S.M.

85. Coenwulf of Mercia (796-821), Bust and quatrefoil type, BLS Cn. 97, North 362, East Anglia, Moneyer Lul. c.798-802

S.M. Obv. +COENVVLFREXM. Diademed bust right.

Rev. LVL+ in leaves of quatrefoilWeight: 1.21 g

Near Stevenage, Hertfordshire, Shown at the BM 11.2.1999

Cracked, but otherwise in good condition

G.W.

86. Coenwulf of Mercia (796-821), Portrait - Cross in Lozenge type, BLS Cn. 113, North 370, East Anglian mint, moneyer Wodel.

Obv. + COENVVLF / REX M-

Rev. PO / d / E / L+

Weight: 1.18 g (18.2 gr). Spalding, near, Lincolnshire. Found by 1999. Information from Chris Sabine.

[1999.0169]

Weight fits neatly in the low end of the five coins listed in BLS. Two more coins of the type have been recorded since: CR 1987: 109 (1.11 g, with a fragment missing) and CR 1991: 123 (1.21 g). The reverses of these three coins are very similar, though with slight variations (and in CR 1991: 123 an upside-down L, which offers precedent for the oddly-reversed d).

S.M.

87. Ceolwulf I of Mercia (821-3), Cross-Crosslet - Cross and Pellets type, BLS Cl. 3, North 379/1, Canterbury, moneyer Swefheard.

Obv. + CIOLVVLF REX M-

Rev. + SVVEFHERD

Weight: 1.33 g (20.5 gr). Wallingford, near, Oxfordshire. M/d find by Kevin Gilbey, by October 1999. [1999.0170]

Swefheard was not previously recorded for Ceolwulf, though we have coins of his for Coenwulf (796-821, (c.820) and for the anonymous Canterbury issue (c.822-3).

S.M.

88. Ceolwulf I of Mercia (821-3), Portrait - Crescent Cross type, BLS Cl. 15, North 383, Rochester, moneyer uncertain

Obv. [ V]LF R[ ]

Rev. Weight: 0.5 g (7.7 gr), fragment.Litlington, near Bassingbourn, Cambridgeshire. M/d find by Bob Moore, 1999.

[1999.0163]

Cl. 15 is a whole example of this type of coin, by the moneyer Eanwulf of Rochester, from different dies.

S.M.

89. Viking imitation of Alfred, Horizontal or Two-Line type, North 475/1, uncertain Danelaw mint, moneyer 'Ludig', c.880-95.

Obv. X EL / FR / ED / RE

Rev. LVDIG / MON

Weight: 1.26 g (19.4 gr). Die-axis: 180.

York, near, Yorkshire. M/d find, late 1998. Information from Brian Kimberley.

[1999.0054]

The weight and style of this coin makes clear that it is an imitation of a coin of the London moneyer Ludig. Alfred's Two-Line coins were minted to a standard of 1.6 g, and the weight rarely fell below 1.45 g. The Viking imitations, on the other hand, were minted to a standard of 1.35g, and rarely rose above 1.45 g.

90. St Edmund Memorial, penny, North 483, moneyer Dægmund

Obv. + SC EADMVN[D R]EX

Rev. + DEI[M JD MOHEA (N reversed)

Weight: 1.26 g (19.4 gr), chipped. Die-axis: 0°.

Little Abington, Cambridgeshire. M/d find by John Barker, 10 February 1994.

[1999.0026]

S.M.

91. St Edmund Memorial, penny, North 483, cf. BMC 302, moneyer Bosecin, Cuerdate phase, c.895-905.

Obv. + 

CEADMIDRE (S sideways, N backwards)

Rev. + BO∽ECIN MO (5 sideways)

Weight: 0.91 g (14 gr). Die-axis: 0°.

Orwell, near / Orwell parish, Cambridgeshire. M/d find by Chris Montague, August 1998. Found within 10 m of the next coin.

[1999.0049]

\$.M.

92. St Edmund Memorial, penny, North 483, cf. BMC 642, moneyer Wine, Cuerdale phase, c.895-905.

Obv. + ∽CEEADMVNDR1 (\$ sideways)

Rev. + VVINE MRONETAL

Weight: 1.33 g (20.5 gr). Die-axis: 0°.

Orwell, near / Orwell parish, Cambridgeshire. M/d find by Chris Montague, September 1998. Found within 10 m of the previous coin.

[1999.0050]

S.M.

93. Ecgberht of Wessex (802-39), Saxon Monogram type, BMC xviii, North 589, West Saxon mint, moneyer Beornheard

Obv. [ ]BEORHT REX

Rev. BEORNHE[]

Weight: 1.13 g (17.4 gr), chipped. Die-axis: 0°.

Kent. M/d find, 1998.

[1999.0070]

S.M.

94. Æthelstan (924–39), fragment, Horizontal type, HT 1. North 668, uncertain mint, moneyer Landbeorht

Obv. [ ]AN REX.

Rev. LO[] / BER[], with two (of three?) crosses visible between and a trefoil below. Weight: not recorded. Dieaxis: 0ß. Winchester, near, Hampshire. M/d find, 31 May 1998. Information from Dr G. Dunger. [1999.0100]

The moneyer is not attested in Æthelstan's reign, but moneyers of this name mint coins for Edward the Elder (Londbriht) and for Eadred (Londberht).

S.M.

95. Eadred (946-55), Horizontal type, HT 1, CTCE — (new moneyer, Winchester style), North 706, uncertain mint, moneyer Otold

Obv. + EADRED REX.

Rev. + OTOL / D MON.

Weight: not recorded; cracked.

Winchester, near, Hampshire. M/d find, 31 May 1998. Information from Dr G. Dunger. [1999.0102]

S.M.

The moneyer's name 'OTOLD' is not previously recorded. It may be a version of the Norse name 'Authvaldr'.

 Eadred (946-55), Bust Crowned type, BMC v, CTCE 268, North 713, uncertain mint, moneyer Wilebert

Obv. + EADRED REX, crowned bust right.

Rev. + VVILEBERT MONETAN, small cross.

Weight: 1.36 g (21.0 gr). Die-axis: 0°.

Bawsey, Norfolk. Time Team excavation, August 1998 [1998.0096]

M.A.S.B.

97. Edgar (959-75), Reform type, BMC vi. North 752, uncertain mint and moneyer, c.973-5

Obv. [ ]R RE[ ]

Rev. (illegible; perhaps [ ]ORN[ ])

Weight: 0.85 g (13.1 gr), fragment.

Ringshall, Suffolk. M/d find by Mark Frost, 1999. [1999.0141]

The reverse is worn and the letters too indistinct for the mint or moneyer to be determined; some name with the element -beorn- (BIORN) is perhaps most plausible, but none are recorded for this type.

S.M.

98. Æthelred II (978–1016), cut farthing, First Small Cross type, *BMC* 1, North 764, Stamford, moneyer Ioli. *Obv.* + ÆÐE[]

Rev. + I[O]D

Weight: 0.19 g (2.9 gr).

Norwich, Norfolk. Excavation find, 1998/9.[1999.0191]

S.M.

99. Æthelred II (978–1016), First Small Cross type, BMC i, North 764, Lincoln, moneyer Grind.

Obv. + Æ-DELRED REX ANG

Rev. + GRIND M-O LHPC

Weight and die-axis not recorded.

Oswestry, near, Shropshire. Found October 1999. Information from Kristin Bornholdt.

[1999.0187]

Ş.M.

100. Æthelred II (978–1016), Long Cross type, North 774: *BMC* iva, Canterbury, moneyer Leofstan.

Obv. +ÆDELRAED REX ANGLOR (Å/Es, N/G and O/R ligated).

Rev. +LEOFSTAN M-O CÆNT (A/E ligated).

Weight 1.5 g. Die-axis 90°.

Thurnham, Kent. M/d find Oct. 1997

D.J.H.

101. Æthelred II (978–1016), Long Cross type, North 775: *BMC* iva, Lincoln, moneyer Dreng.

Obv. +AEDELRÆD REX A[NGLORX] (A/Es, ligated).

Rev. +DRENG M'Ω'O LI[]

Weight 1.3g. Die-axis 270°.

Hollingbourne, Kent. M/d find Sep. 1998.

Chipped. Dies B/d (Mossop).

D.J.H.

102. Æthelred II (978–1016), Last Small Cross type, North 777: BMC i, Canterbury, moneyer Aelfred.

Obv. +AEDE[L]RAED REX [AN]G: (A/Es, ligated). Rev. [+]AELFRE[D M]ΩON CEN (A/Es, ligated).

Weight 0.7 g. Die-axis 270°.

Near Worth, Kent. M/d find Aug 1998.

Broken, chipped, poor condition.

D.J.H.

103. Cnut (1016-35), Quatrefoil type North 781: BMC viii, London, moneyer Wulfwine.

Obv. + CNVT REX ANGLO

Rev. +PVLFPINE ON LVND (NL ligated).

Weight 1.1 g. Die-axis 270°.

Court-at-Street, Lympne, Kent. M/d find Oct. 1998.

Pierced, weakly struck. Same dies as SCBI 14, 3001.

D.J.H.

104. Cnut (1016-35), Quatrefoil type, North 781: BMC

viii, York, uncertain moneyer

Obv. +CNVTREXANGLOV

Rev. +FA\_\_\_'INOEO

Weight 0.90 g. Die axis: 180°.

Said to be M/d find from Findon, Essex. Shown at the BM late autumn 1998.

G.W.

105. Cnut (1016-35), Pointed Helmet type, North 787: BMC xiv, Canterbury, moneyer Leofnoth.

Obv. +CNVT RECX [AN]

Rev. +LEOFNOD [O]N CEN[T+]

Weight: 0.9 g (worn). Die-axis: 0°.

Barham, Kent. M/d find July 1999.

D.J.H.

106. Cnut (1016-35), Pointed Helmet type, North 787; BMC xiv, uncertain mint and moneyer

Obv. \_CNVT\_\_

Rev. \_\_OR`EST: (O)\_\_\_\_

Weight: 0.54 g Die axis: 180° (?).

Said to be found near Chichester, West Sussex. Shown at the BM 27.7.99. Heavily chipped, with at least two thirds of the inscription missing.

G.W.

107. Edward the Confessor (1042–66), cut farthing, Hammer Cross type, *BMC* xi, North 828, uncertain mint and moneyer.

Obv. (illegible)

Rev. (illegible)

Weight: 0.31 g (4.7 gr).Linton, near, Cambridgeshire. M/d find by John Barker, by February 1999.

[1999.0030]

Same site as 1999.0023, 1999.0024.

S.M.

108. Edward the Confessor (1042–66), Bust Facing/ Small Cross type, *BMC* xiii, North 830. London, moneyer Æthelwine

Obv. EADPARD REX ANGL

Rev. + ÆGLPIN: ON LVNDE

Weight: L01 g (15.5 gr).

Hadstock, Essex. M/d find by John Barker, 6 September 1007

[1999.0027]

S.M.

Ottonian

109. Otto III, with Adelheid as regent (983-1002), Type I

Obv. Crude bust left, inscription illegible

Rev. Short cross within inner circle, letters ODOD in angles, outer inscription illegible

Weight: 1.26 g

Alby with Thwaite, Norfolk. Via Norfolk Archaeology service, 1999

G.W.

Post Conquest Coins English Coins

110. William I, Two Sceptres type, BMC IV, London moneyer Colswegen.

Rev. COLSWEGEN ON LVND

Weight and die-axis not recorded.

Llanbadoc, Monmouthshire; found in the church during restoration work in 1873.

Information from Mrs Jan Barrow, April 1999, quoting the Country Observer ..., March 1873. Present whereabouts unknown. (Not illustrated).

E.M.B.

 William I (1066-87), Canopy type, BMC iii, North 843, Ipswich, moneyer Leofstan

Obv. + PILLEMII REX

Rev. + LIOFSTAN ON GIPESPI

Weight: 1.21 g (18.6 gr). Die-axis: 270°.

Ware, Hertfordshire. M/d find, 1999. Information from Paul Murawski. [1999.0190]

112. William I (1066-87), PAXS type, BMC viii, North 848, Norwich, moneyer Ulfcetel

Obv. +PILLELMREX

Rev. +VFCITL'ONOR-DPI

Weight 1,24g Die axis 270°.

Morley, Norfolk. M/D find, via Norwich Castle Museum,

December 1998.

G.W.

113. William I (1066-87), PAXS type, BMC viii. North 848, Southwark, moneyer Osmund

Obv. + PILLELM REX

Rev. + OSMVND ON SV-DE

Weight: 1.31 g (20.2 gr), chipped and broken. Die-axis: 270°. Brailes, Oxfordshire. M/d find by Graham Pratt, 4 September 1999.

[1999.0150]

S.M.

G.W.

114. William II (1087-1100), Cross in Quatrefoil type, BMC ii, North 582, Winchester, moneyer Edwine

Obv. +PILLELMRE

Rev. +EDPINEONPINC

Weight: 1.32g Die axis: 270°.

Shaftesbury, near, Dorset. Shown at the BM 2.9.1999.

115. William II (1087-1100), Cross Voided type, BMC iii, North 853, Lincoln, moneyer Folcard

Obv. + PILL[E]
Rev. []LCIERD[]

Weight: 0.74 g (1).4 gr), fragment. Die-axis: 180°.

Homcastle, near, Lincolnshire. M/d find by A. Wootton, October 1999.

[1999.0164]

S.M.

116. Henry I (1100-35), Profile/Cross Fleury type, BMC ii, North 858, Stamford, moneyer Arnketill

W. Obv. + HIENRIR

Rev. + ARCIL ON STEN

Weight: 1.25 g (19.2 gr).Dereham, near, Norfolk. M/d find, 1999. Information from Paul Murawski. Acquired by the Fitzwilliam Museum (CM.32-2000)

[1999.0189]

Same dies as SCBI 53 (Scottish Collections, forthcoming): 243.

S.M.

117. Henry J (1100-35), PAX type, BMC iii, North 859, London, moneyer Ælfwine

Obv. [ ]EN[R ]EX, facing bust.

Rev. 4 JELFPINE ON LVN (NL ligatured), PA+ in field between two lines with two annulets above and below. Weight: 1.26 g (19.4 gr). Die-axis: 0°.

Linton, near, Cambridgeshire. M/d find by John Barker, October 1991

[1999.0028]

S.M.

118. Henry I (1100-35), Pointing Bust and Stars type, BMC vi, North 862, Sandwich, moneyer Adalbot

Obv. + hENRI REX

S.M. Rev. + ADALBOT: ON: A (S sideways)

Weight: 1.29 g (19.9 gr), bent. Die-axis: 180°.

Aylesbury, Buckinghamshire. M/d find, 1999. Information from Paul Murawski.

[1999.0059]

Adalbot is known at Sandwich for Henry I's type 7 (SCBI 11b (Stockholm): 275), but this is his first recorded coin of type 6.

S.M.

119. Henry I (1100-35), Quatrefoil with Piles, BMC vii, North 863, Lincoln, moneyer uncertain

Obv. []NRIE RE[X]

Rev. +[ ]INCOL

Weight: 0.56 g (8.6 gr), cut halfpenny. Die-axis: 0°.

Horncastle, near, Lincolnshire. M/d find by A.Wootton, October 1999.

[1999.0165]

S.M.

120. Henry I (1100–35), Full Face/Cross Fleury type, BMC x, North 866, London, moneyer Sperling

Obv. HENR[ ]REX A[ ]

Rev. [S]PERLING ON LV[N]

Weight: 1.3 g (20 gr). Die-axis: 0°.

Hadstock, Essex. M/d find by John Barker, 6 December 1998. [1999.0029]

S.M.

121. Henry I (1100-35), cut halfpenny, Full Face/Cross Fleury type, BMC x, North 866, Warwick (?), moneyer

Swerhavec (?) Obv. \_\_\_(\$)REX (A) \_:hAVECO(N)\_

Weight: 0.49 g, cut halfpenny. Die axis 0°

New Romney, near, Kent, M/d find by S. Harmer, 1999. The attribution to Warwick is uncertain, but the style is consistent with BMC, Pl. XLII, 3, although the coin is not struck from the same dies.

G.W.

122. Henry I (1100-35), Quadrilateral on Cross Fleury type, BMC xv, North 871, London, moneyer Eadgar

Obv. [ ]ENRICV[S ] Rev. ÆDGAR[]

Weight: 0.7 g (10.8 gr), cut halfpenny.

Horncastle, near, Lincolnshire. M/d find by A. Wootton, October 1999.

[1999.0166]

S.M.

123. Henry I (1100-35), Quadrilateral on Cross Fleury type, BMC xv, North 871, London, moneyer Dereman (?) Obv.

Rev. + D[E? L?]VN

Weight: 0.58 g (8.9 gr), cut halfpenny.

Stowmarket, near, Suffolk. M/d find by Mark Frost, 1999. [1999.0139]

The moneyer is most likely Dereman of London, who is the most common moneyer of this type of Henry I.

S.M.

124. Henry I (1100-35), cut farthing, Quadrilateral on Cross Fleury type, BMC xv, North 871, mint and moneyer uncertain

Obv. [ ... } Rev. [ ]PNh: O[ ]

Weight: 0.29 g (4.4 gr), cut farthing.

North Elham, Kent. M/d find by Christopher Wren, 1999.

[1999.0152]

S.M.

125. Stephen, Cross Moline type, BMC 1, North 874. Carlisle, moneyer Erebald.

Obv. STIFNERE [:+:]

Rev. +EREBALD: ONCAR []; last letter L or malformed D? Weight 1.3 g. Die-axis 90°.

Near Catterick, Yorkshire, M/d find, 1999.

The obverse die may be as Mack 281 (Erebald at ?Edinburgh) and 282 (Odard at Carlisle) (BNJ 35, 1966, 38-112, at p.98 and Pl. XII). This variety of penny (North 874) is usually described as having the inner circle missing on the obverse, but here (and on Mack 281 and 282) the inner circle would be more accurately described as 'partial'. No parallel for the reverse die has been established.

P.D.\$./N.H.

126. Stephen, penny, issue of c.1145-50, North 878: BMC ii, Dover, moneyer Adam.

Obv. [+]STJEFNE

Rev. +ADAM : ON [:] DOVRR

Weight 1.4 g. Die-axis 270°. Near Sandwich, Kent. M/d find from one mile south of

Medieval town, 1998.

127. Stephen (1135-54), Profile/Cross and Piles type, BMC vi, North 879, mint and moneyer uncertain Obv. STIEFNE

Rev. +[ N?]

Weight: 0.86 g (13.2 gr). King's Lynn, near, Norfolk. M/d find, 1999. Information from Paul Murawski. [1999.0188]

S.M.

128. Stephen (1135-54), cut farthing, Awbridge type, BMC vii, North 881, mint and moneyer uncertain Weight: 0.35 g (5.4 gr).

Norwich, Norfolk. Excavation find, 1998/9.

[1999.0192]

S.M.

129. Stephen (1135-54), variety of 'Watford' type, BMC i, North 887, Oxford, moneyer Adam.

Obv

Rev. + ADA[]

Weight: 0.9 g (13.8 gr), fragment.

Oxford, near, Oxfordshire. M/d find by Kevin Gilbey, October 1999.

[1999.0171]

S.M.

130. Stephen (1135-54), baronial issue based on Henry I, BMC xv and Stephen, BMC i, possibly Henry of Anjou. Obv. Crowned bust right, with sceptre in front, based on Stephen, BMC i, illegible inscription

Rev. Quadrilateral on Cross Fleury, based on Henry I, BMC xv, illegible inscription

Weight, 0.86 g.

Shaftesbury, near, Dorset. M/d find, 1999. The combination of a Stephen obverse with a Henry I reverse suggests a baronial issue of the reign of Stephen. The coin is stylistically very close to a legible coin in the National Museum of Wales (E.986, Boon 26), with the legend bENRICV.Sb., attributed to Henry of Anjou. The south-western provenance is also consistent with a coin of the Angevin party.

G.W.

131. Henry II (1154-89), cut halfpenny, Tealby type, uncertain class, North 952-61, mint and moneyer uncertain

Obv. (illegible)

Rev. [ ]V[ ]:[ ]

Weight: 0.56 g (8.6 gr), worn.

Hadstock, Essex. M/d find by John Barker, by February 1999.

[1999.0031]

S.M.

132. Henry II (1154-89), cut farthing, Tealby type, uncertain class, North 952-61, mint and moneyer uncertain Weight: 0.26 g (4 gr), cut farthing, Die-axis: 0°.

Hadstock, Essex. M/d find by John Barker, by February 1999.

[1999.0032]

S.M.

133. Henry II (1154-89), Tealby type, class C2, North 957, mint and moneyer uncertain

Weight: 0.61 g (9.4 gr), D.J.H.

Ely, Cambridgeshire. Excavation find, 1999. Information from N. E. Challands.

[1999.0074]

S.M.

134. Henry II (1154-89), cut halfpenny, Tealby type, class D-F, North 958-60, mint and moneyer uncertain

Obv. [h]EN[R] Rev. (illegible)

Weight: 0.66 g (10.1 gr).

Stowmarket, near, Suffolk. M/d find by Mark Frost, 1999. [1999.0140]

S.M.

135. Henry II (1154-89), Tealby type, class F, North 961,

Canterbury, moneyer Ricard Obv. [E]X AN

Rev. RICAR[ N CA ]

Weight: 1.32 g (20.3 gr). Die-axis: 180. Bury St Edmunds, Suffolk. M/d find, 1999.

[1999.0071]

S.M.

136. Edward I (probably), two pennies folded together (obverses inwards), uncertain classes, Durham and York. Rev 1. CIVI TAS DVR EVE.

Rev 2, CIVI TAS EBO RACI, quatrefoil at centre.

Weight not recorded.

Evesham, Worcestershire. M/d find, Spring 1999, by Mr J. Bridgewater.

D.J.S./A.B.

137. Edward III, quarter noble, London, Pre-Treaty, Series G, North 1191.

Weight 1.86 g.

Wixford, Warwickshire. M/d find by Mr C. Kibblewhite in 1998.

D.J.S./A.B.

138. Henry VI, halfpenny, Cross-Pellet issue (1454–60), new type corresponding to the farthing North 1525. Obv. HENRIC[...]; saltire on neck and pellets by crown.

Rev. CIVI-TAS-LON-DON.

Weight 0.45 g.

Angle area, Pembrokeshire. M/d find by J.R. Tree, July 1998. E.M.B.

139. 'Charles II', counterfeit of tin farthing of 1684-5; lead, with inset brass plug.

Obv. CAROL- [...]; bust. r.

Rev. Britannia, seated r.

Weight 7.98 g.

Llantwit Major, Vale of Glamorgan. M/d find by A. Jones, August 1999.

The designs have been reversed in the copying. The piece is crudely made, but the inset brass plug of the genuine article seems to have provided no deterrent to the forger.

E.M.B.

Irish Coins

140. Ireland, Charles 1, groat of Lords Justices issue of 1643.

Obv. CR, crowned

Rev. D / IIII

Weight 1.56 g.

Wisemans Bridge, Pembrokeshire. M/d find on beach by C.L. Scale, April 1999.

The Lords Justices ('Ormonde') coinage was declared legal tender in England and Wales in October 1643, but finds are rare, the only secure Civil War context being a crown in the Tregwynt, Pembs., Treasure Trove (BNJ 68, pp. 119–36). Another crown was included in the Congleton hoard of the 1670s; and a half crown was offered by M. Trenerry, July/August 1999, no. K182 as 'found in Essex'.

E.M.B.

Scottish Coins

141. Alexander III (1249-86), penny, Type 3, Montrose, Walter, Seaby 5043.

Rev. WA LTE RON MVN.

Weight 1.37 g. Die-axis 60°.

Pirton, Worcestershire. M/d find by Mr D. Crawford.

The same reverse die as (and probably the same obverse) as Spink Auction no. 57, 29 April 1987, lot 81 (ex J.K.R. Murray).

D.J.S./A.B.

142. Robert II (1371-90), penny, Edinburgh, Seaby 5148. Weight 0.82 g (chipped). Die-axis 280°.

Powick, Worcestershire. M/d find (Mr D. Crawford) 1999. An extremely rare variety.

D.J.S./A.B.

Continental Sterlings

143. Herstal, John of Louvain (1285-1309), silver esterlin, one of Mayhew 80-82.

Weight not recorded (fragment). Die-axis 90°.

Upton Snodsbury, Worcestershire. M/d find by Mr Bridgewater.

D.J.S./A.B.

144. Aquitaine, Edward II (or III), demi-sterling, Elias 57.

Obv. [ ]DWARD[ ]; crowned bust three-quarters left, leopard below.

Rev. DVX[]NiE; long cross with crowns in angles.

Weight 0.32 g, corroded and incomplete.

Louth, near, Lines. Found by Mr A. Eley, October 1999.

The attribution of the Aquitaine sterlings to Edward II or III is not clear-cut, though the evidence cited by Mayhew (BSFN, Oct 1995, 1147-51) points to an issue in the reign of Edward II.

E.M.B.

European Coins

145. Germany, Bishopric of Münster, 13th century, cut half pfennig.

Obv. [ ]E PAVL[ ], facing head of St. Paul.

Rev. +M[]IVM. cross with sexfoils in angles.

Weight 0.59 g. Die-axis 120°.

Pershore, Worcestershire. M/d find (Mr D Crawford) 1999.

D.J.S./A.B.

S.M.

146. French, Brittany, Duke John V (1399-1442), billon, grand blanc, Nantes mint (mm. N in obv. inscription). Poey d'Avant 983 var.

Obv. + IOHANE[\$ - BRI]TON[V - DV]X - N, crown enclosing annulet and three ermines below.

Rev. + SIT - N[OME + D]NI BENEDTV (some double striking; ? annulet between fourteenth and fifteenth letters), floriate cross.

Weight: 2.17 g. Die-axis: 45°.

West Ashby, near, Lincs. M/d find by A. Wootton, 1999. Acquired by the Fitzwilliam Museum (CM.161–1999).

147. Flanders, Philippe le Bon (1433–67), silver groot. Weight 1.07 g (chipped).

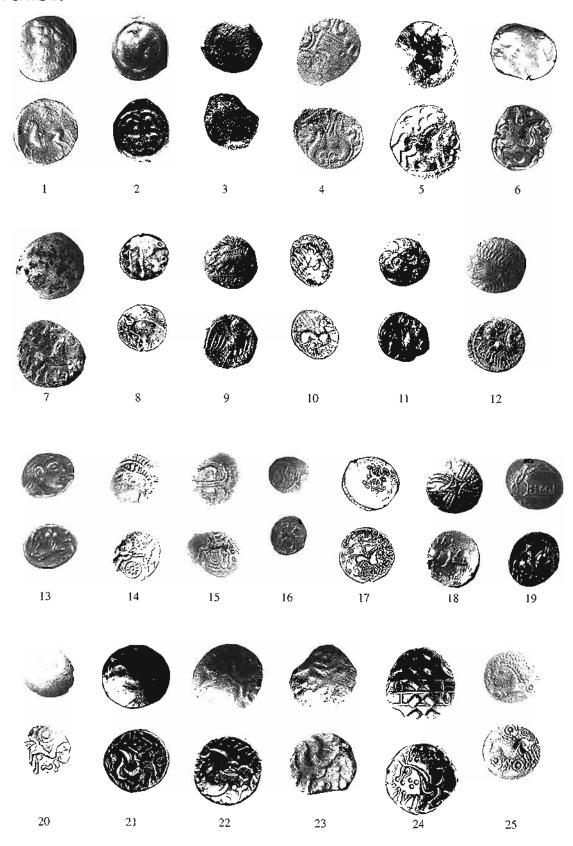
Congleton, Cheshire, M/d find (Mr K. Pay), July 1999. D.J.S./A.B.

Coin Weights

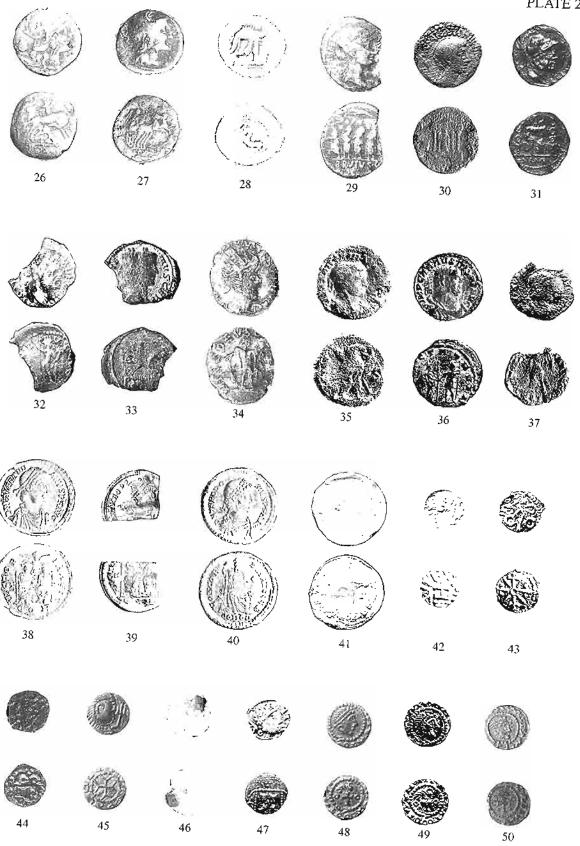
148. Brabant, Hexagonal coin weight for a 'Lion d'or'. Cf. Dieudonné pl. 10, 15.

Weight 3.49 g. Diam. 14/17 mm.

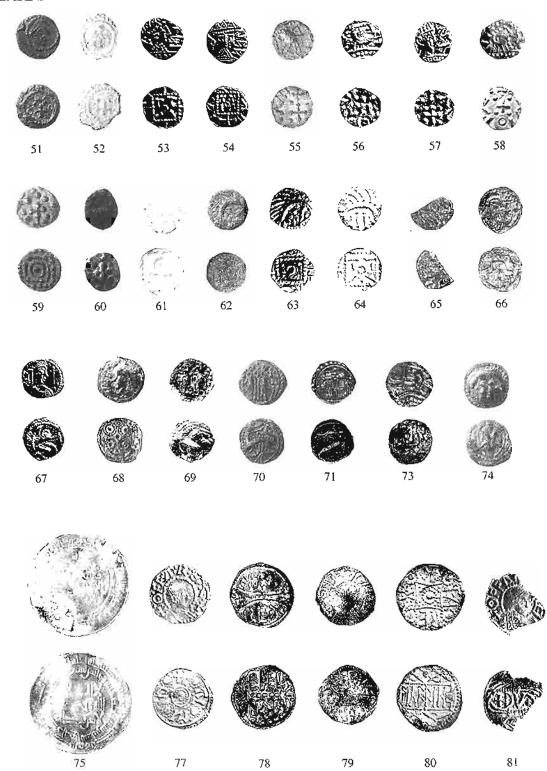
M/d find at Monkton Deverill, Wiltshire. (Not illustrated).

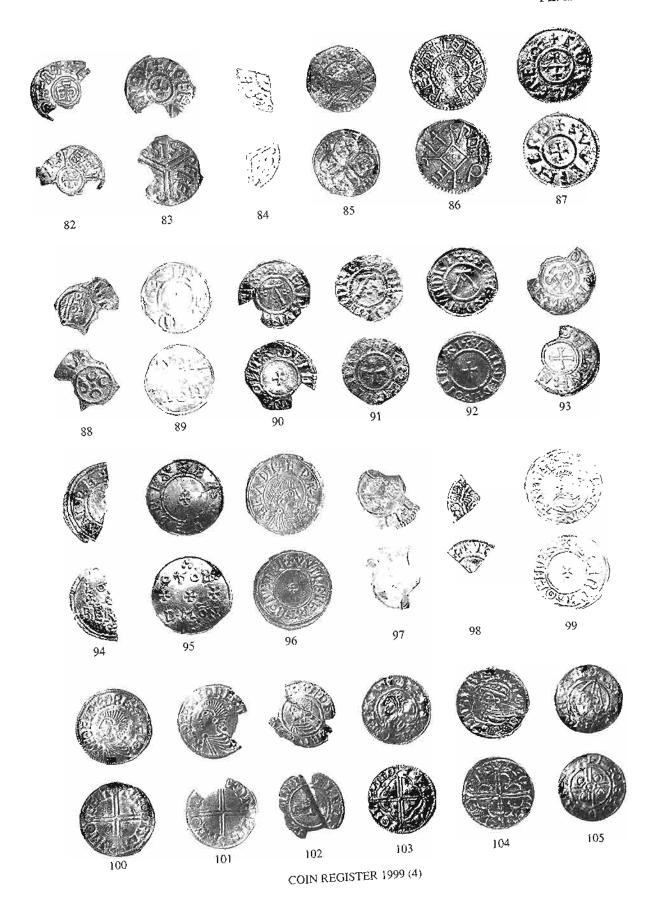


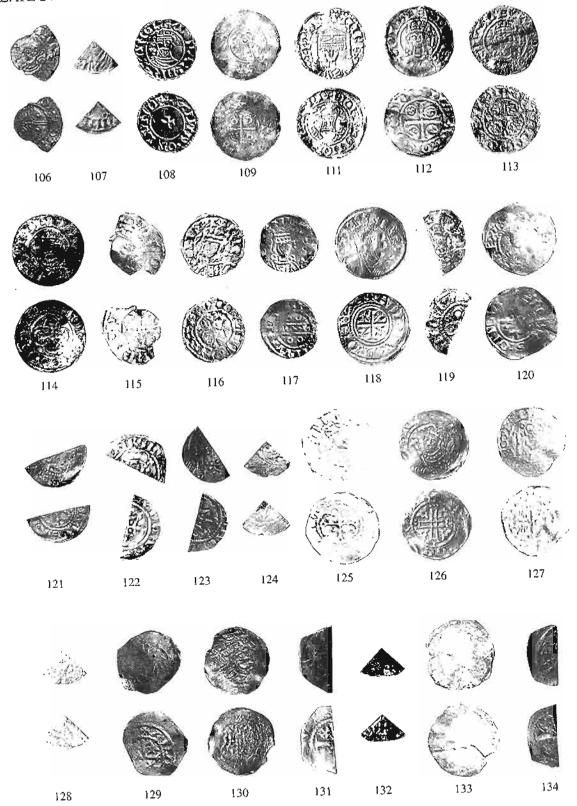
COIN REGISTER 1999 (1)



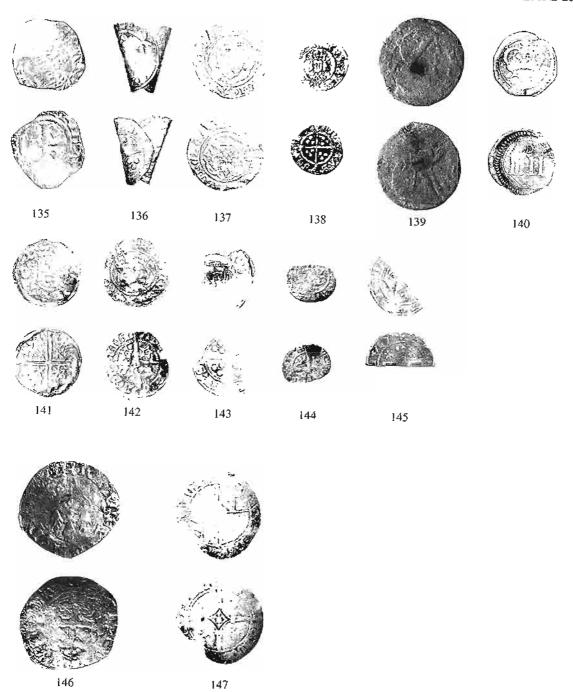
COIN REGISTER 1999 (2)







COIN REGISTER 1999 (5)



#### REVIEWS

Money: A History, edited by Jonathan Williams (British Museum Press, 1997), 256 pages.

To all except the most narrow specialist this book will be of interest. Its scope is vast, covering the history of money from earliest times to the end of the twentieth century. Individual chapters consider the coinages of the first civilizations, the Roman world, medieval and early modern Europe, the Islamic lands, Asia, Africa and Oceania, Each chapter is written by a specialist curator from the Department of Coins and Medals at the British Museum and their contributions are lavishly illustrated with coins and other forms of money, the majority being from the BM's own collections.

Money: A History draws on a variety of sources beyond the coins themselves. Documentary sources are used throughout, ranging from the Book of Genesis, Mark's Gospel, the Qur'an and the Hindu Vedas to classical authors such as Livy, Lucan and Pliny and, closer to our own time, Adam Smith, Karl Marx and John Maynard Keynes. For the earlier periods archaeological evidence is cited, as for example the el-Amarna hoard from Ancient Egypt, or the relative numbers of coins recovered from the urban and rural sites of Roman Britain. For the latter periods the writings of anthropologists such as Bronislaw Malinowski or Mary Douglas are introduced to consider the economies of indigenous societies. Nor are artistic representations of the social context of money ignored; indeed the book's cover is illustrated with the early sixteenth-century painting by Quentin Matsys, A Money Lender and his Wife.

This is a highly readable volume. It is based on sound scholarship that is not diminished by a popular approach. *Money: A History* illustrates many coins familiar to the British numismatist, such as the follis of Constantine the Great with the 'camp gate' reverse, or an Edwardian long cross penny or the Soho 'cartwheel' twopenny coin. He or she might also be aware of the silver grosso of Venice, the Maria Theresa thaler or the brass manilla used as a means of exchange in West Africa. But how many have encountered the amazing variety of coins used by the Chinese or the cloth money of the Congo? To the present reviewer, a museum curator, it will undoubtedly prove a useful starting point for further research. Perhaps uniquely it has a gateway function, allowing access to more detailed sources through its extensive bibliography.

Of course in any book of this nature there are bound to be omissions. It is rather surprising though that the Celtic coinages of Britain and Gaul are almost completely ignored, especially in view of the recent publication of the British Museum's own collection (Hobbs 1996, British Iron Age Coins in the British Museum). These coins are dismissed in a single short sentence and one illustration of a classically inspired coin of Tincomarus that is hardly representative. However, this would appear to be the only significant example.

The great strength of *Money: A History* lies in the opportunity it affords the reader to explore the development of money in different areas of the world at different times. It is possible to identify the routes by which the use

of money spread outwards from its origins in Mesopotamia and Egypt five thousand years ago. The original practice of bullion use developed into the first coinage in Lydia and the Greek city states. Greek influence then spread coin use eastwards to India and westwards to the emerging city state of Rome during the late fourth century BC. The Roman Empire itself created a unified system across its extended territory, in much the same way that the colonial powers of the nineteenth and twentieth centuries would introduce their concept of money into Africa and Oceania. There are also recurring themes across time and space. For example the role of the banker in society was filled by the merchants of Tuscany and Lombardy in fifteenth-century Italy and by the Jains, a Buddhist sect, in twelfth-century India. Yet by contrast it is clear that European notions of money are very different from those of indigenous societies elsewhere in the world, especially in Africa and Oceania. Here money serves not as a 'medium of exchange', but as a 'means of making payments' to create and maintain various complex social relationships in what were once described as 'primitive cultures'.

The design of the volume is of a very high standard. Page layout is varied by clever use of illustrations at different sizes and locations within the text. Many of these 500 or so illustrations are in colour. The text is uncluttered by bibliographic references, footnotes or figure numbers—these latter appear in the margin at the relevant point in the text. This makes it easier to follow the arguments advanced by the authors. The use of picture essays within each chapter is also worthy of praise, as it adds an extra dimension both in design terms and information content.

The book was published to accompany the opening of the HSBC Money Gallery at the British Museum on 30 January 1997. For those able to visit this gallery it will act as a reminder of the importance of this event in the presentation of money as a subject in a museum display. For all it remains a beautifully designed and scholarly account of this aspect of human society.

PHILIP J. WISE

Sylloge of Coins of the British Isles 50. Hermitage Museum, St. Petersburg. Part 1. Anglo-Saxon coins to 1016. By V.M. Potin. Published for the British Academy by Oxford University Press and Spink & Son Limited 1999. viii + 184 pages, including 54 plates. Publishers cloth.

The appearance of the fiftieth volume in the SCBI series is an event which those who launched the SCBI project in the mid 1950s can scarcely have dared to predict. To publish as many as fifty volumes in a period of just over forty years – the first volume appeared in 1958 – is by any standard a remarkable achievement, and the numismatic community is deeply intended to the unselfish labours of those who have successively edited the series (Christopher Blunt, Michael Dolley, Mark Blackburn). They would themselves as readily acknowledge the steady support that the series editors have always received from the distinguished scholars who have in turn chaired the British

Academy's SCBI committee (Sir Frank Stenton, Dorothy Whitelock, Henry Loyn, Lord Stewartby), and altogether the history of the project has been a happy one.

For those with a sense of history it is also fitting that this fiftieth volume should appear under the authorship of Dr. Vsevolod Potin, first appointed to the staff of the Hermitage Museum shortly before the German invasion of the Soviet Union in 1941, and more familiar with its numismatic collection than any other living person. As Dr. Potin's preface records, it was he who prepared the complete card catalogue on which the volume is based, no small undertaking when the collection contains no fewer than 1508 coins struck before the end of the reign of Aethelred II, and although the final text was entered on computer by William Lean, to whom the volume is much indebted, the volume is a fitting culmination to decades of scholarly work by Potin on Viking-Age coins found in the territory of the former Soviet Union.

Surprisingly enough, it is not until coin 266 in the volume, a poor specimen of a coin of Eadgar's Reform type by the York moneyer Fastolf, that the reader will come across a coin which might well have been found in Russia or in one of the smaller states on its Baltic seaboard. All the previous 265 coins look likely to have been discovered in Britain or Ireland, with the possible exception of a handful of Series E sceattas ('porcupines') which may derive from a find or finds in the Netherlands. The presence in the Hermitage collection of so many coins of British or Irish provenance struck under Eadweard the Martyr's predecessors is largely due to the purchase for the Hermitage in the late 1850s of a very large collection formed by Jakob Reichel (1780-1856), a St Petersburg resident who bought extensively from London dealers and London auction sales from the 1830s onwards. Another collection, confiscated from the aristocratic Stroganov family after the October Revolution and housed in the Hermitage since 1925, also incorporates numerous coins likely to have been acquired in London, whether by agents acting for the Stroganovs or by other collectors whose collections were later acquired by the Stroganovs en bloc.

So far as the Reichel coins are concerned, a printed catalogue was issued by the collector himself between 1842 and 1845, and Reichel's own annotated copy of this, still preserved in the Hermitage, enables a reliable reconstruction of what the collection contained and which coins from it feature in the present volume. Additionally, Reichel's surviving marked copies of London auction catalogues reveal that individual coins derive from such well-known collections as those of Very Rev. H.R. Dawson (the 'Dean of St Patrick') and John Brumell, while other coins are sufficiently distinctive that they can plausibly be identified as specimens which once belonged to J.D. Cuff, C.W. Loscombe and collectors of similar date and standing.

The result is that for the period preceding Eadgar's reform the scholar of today is confronted by a wide-ranging selection of material typifying what was available on the London market in the second quarter of the nineteenth century: sceattas, stycas, pennies of Offa, coins of the 840s and 850s probably deriving from the Sevington or Dorking hoards, pennies of Burgred, a parcel from the Cuerdale hoard, and quite a fair selection of coins of rulers from Eadweard the Elder onwards. These last have an unpretentious appearance — Reichel's distance from

London must have made it difficult for him to obtain any of the more striking rarities in the series – but they include a number of individual coins which are in fact the only known specimens of particular moneyers or varieties.

The Hermitage's holdings for Eadgar's Reform Small Cross type and for Eadweard the Martyr still appear to be of predominantly British origin, but Aethelred's First Small Cross type is a watershed - the type is entirely absent from the collection - and from this point onwards the great bulk of the coins may be presumed to have been found in Russia, the Baltic states or Scandinavia. A list of nineteen hoards known or likely to be represented by coins in this volume comprises seventeen from Russia, one from Latvia, and one from what is now Ukraine, but a good proportion of the coins of Aethelred II in the Reichel and Stroganov collections could well derive from comparable hoards found in Sweden or Denmark in the first half of the nineteenth century. Lean has in fact discovered since the volume was published that coins 316 and 923, acquired by Reichel at a Stockholm auction sale in 1853, derive from an eighteenth century hoard from Lundby in Sweden reconstructed some years ago by Kenneth Jonsson, and he also now feels confident that coin 1123 is a specimen that featured as lot 1555 in the 1790 sale in Copenhagen of the collection of Count Otto von Thott. More importantly, a note in the archives of the Royal Coin Cabinet in Stockholm (discovered by Kenneth Jonsson prior to this volume's publication but inadvertently not cited in the volume's introduction) reveals that in 1860 the Hermitage Museum received as part of an exchange with Stockholm 85 coins of Aethelred II and one of Eadweard the Confessor, not further described but all presumably deriving from Scandinavian sources.

The specialist in the coinage of Æthelred II will see that William Lean has devoted very considerable effort to checking for die-links in this reign, both within the volume and with coins in other collections. This has enabled him to record a number of new obverse die-links connecting coins of different moneyers and mints, and although the conventions of the SCBI series have precluded him from highlighting those which are especially unusual or surprising, his has been an exemplary contribution for which future students of the coinage of Aethelred II will be permanently grateful. Students of the issues of the Lincoln mint may also like to know that Lean has discovered that a number of the coins of Aethelred II in the Hermitage are from dies or die-combinations not recorded by the late Henry Mossop, and it would be interesting to know to what extent new material discovered since the publication of Mossop's book in 1970 have affected calculations as to the total number of obverse and reverse dies used at Lincoln in any given type in the later Anglo-Saxon period.

It is customary to end a review by pointing out any obvious minor errors or omissions, but the volume has been prepared with such expertise that the present reviewer has on his own part only discovered one omission, and that an omission for which the responsibility is in fact his, since when looking at the relevant part of the catalogue in draft he failed to remember that there are two surviving manuscript catalogues of Dean Dawson's collection. These indicate that the two coins of Eadweard the Elder acquired for Reichel at the Dean of St Patrick sale in 1842 were most probably coins 212 and 213 in the present

volume (Lean's text leaves it open which two of the three coins 212-14 derive from the 1842 sale).

Lean has however himself drawn the reviewer's attention to a few additional minor blemishes in the volume, most notably the fact that the obverse die-link claimed in it between coin 757, a coin of Æthelred's Long Cross type by the London moneyer Aethelred, and a coin of the same type by the Oxford moneyer Leofman, SCBI Polish Museums 100, is a mirage (an error was made when mounting the plates of the Polish Museums volume). He also points out that the weights given for coins 517 and 523, and perhaps for other coins as well, need re-checking.

**HUGH PAGAN** 

Sylloge of Coins of the British Isles 47. The Herbert Schneider Collection, Part 1, English Gold Coins and their Imitations, 1257–1603, by Peter Woodhead, Spink, 1996, 463pp. (83 plates).

THE modern classification of the English gold coinage from 1344 to 1603 was an enterprise that occupied mentbers of the British Numismatic Society and others throughout the first half of the twentieth century. The classifications, reign by reign, made use mainly of privy marks and letter punches, and on that basis divided the coins into successive varieties, which could be formally defined and recognized, and which could be dated more or less closely. The study of the gold almost always played second fiddle to that of the silver, which seemed to offer a more secure basis, if not for classification, then at least for exact chronology. That was so, partly because the minting of silver tended to be more abundant, and was sometimes more continuous, but mainly because the material to be studied was more abundant and - let us admit - more affordable. There was also sometimes the difficulty that, as Peter Woodhead expresses it in his splendid sylloge volume, 'the gold coinage ... does not run exactly in parallel with the silver and cannot satisfactorily be classified with it' (p. 71).

The roll-call of distinguished names is impressive indeed. F. A. Walters published in NC 1904-5; L.A. Lawrence wrote a series of four papers also in NC, 1926-33, subsequently reprinted as a book; the deep store of learning of G.C. Brooke is summed up in English Coinage (1932); C.A. Whitton published in BNJ between 1938 and 1951; C.E. Blunt published thoughtful and important work in BNJ from 1935 onwards, and also collaborated with Whitton; Winstanley made his contribution in the 1940s and subsequently. The list could be made fuller, but the point to note is that these and other scholars made a thorough job of the task of classification and that therefore their work has cast long shadows. Sometimes it has seemed that there was little left to do that would be impressive. A more recent hoard may have yielded coins which served to clarify, confirm, or correct some small section of the scheme, and the publication which discusses that point is an essential part of our working bibliography, but somehow the great men of the past still occupy the foreground.

And our attitudes towards numismatics are not exactly their attitudes. Standing on their shoulders, we see a little farther. We are more intrigued than perhaps they were, with how the classification correlates with the composition of hoards. How the varieties correlated with the output figures has long been a preoccupation, especially since Stokes published the bullion tables in 1929 – and sometimes it has been a headache. Monetary historians such as Mavis Mate have approached the gold coinage with quite other questions in mind than the antiquarian concerns of the great numismatists of the past, making one wonder sometimes just how much the numismatic detail of the gold coinage has to offer to the general historian. Finally, we like to know nowadays how many dies were used, and how the numbers of dies might correlate with the varieties, as a perspective on the status of the varieties.

We are at last seeing a real resurgence of interest, for example in Challis's magisterial work, culminating in *The Tudor Coinage* (1978) and, of course, the *New History of the Royal Minu* (1992). At the hands-on level, the detailed researches of Tim Webb Ware stand in the fine tradition of 'the British'.

The late Herbert Schneider was a member of the Society from 1947 onwards, which is the year in which he was demobilised from the British army. His magnificent collection of English gold coins was built up mainly from that time onwards. This first volume records 890 coins, chosen with care and purpose, and in some sections dense enough to aspire to represent individual dies. The photographs, by the *maestro*, Frank Purvey, are of very high quality, faithfully reproducing the softness of the gold. The catalogue entries, with meticulous transcription of the legends (in the inscriptional typeface in the genesis of which your reviewer had a hand), record all the diagnostic details, die-links, multiple references to publications, and quite often enviable pedigrees. The arrangement and procedure of the entries are explained at pp. 127–9.

Peter Woodhead modestly says that 'to some extent this Sylloge has written itself, as indeed a catalogue of any soundly assembled collection should'. How very far this is from the truth, only those who have laboured to prepare sylloge volumes will fully appreciate. His introduction of nearly a hundred pages gives a succinct, careful, and very thorough summary of the gold coinage, under the six headings (for each reign) of Background, Issues, Mints, Conditions, References and Classification, and Output. The discussion incorporates tables of mint-output. The quantities of bullion conflate the amounts used for each denomination, so that if we attempt to make estimates of average output per die, the figures will inevitably be slightly impressionistic. One's impression (but it is no more than that) is that dies for gold were often under-used in relation to their presumed technical capacity. This has a bearing on the 'fine tuning' of the correlation between varieties and bullion accounting periods.

The entirely admirable introduction is followed by a hoard-list with 197 entries – again a most welcome and indispensable *instrument de travail*. There is a good bibliography and an index of provenances.

The Schneider collection opens auspiciously with the gold penny of Henry III, one of only seven known specimens; this one is ex Grantley who, interestingly, bought it in Rome. No 2 is a quarter-noble of Edward III, of 1344–6. Thereafter the representation becomes dense, in almost every known type. The reign of Edward V is represented, in accordance with Webb Ware's new classification, by just one or possibly two coins (nos. 482 and ?481). From the late fifteenth century onwards, the

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collection contains more sovereigns and pounds than one could hope to dream about, never mind lay hands on. Finally, and appropriately in view of Schneider's trading base in Antwerp, the volume ends with an outstanding collection of continental imitations of English nobles (nos. 826–38) and ryals (839–80), the latter with quite heavy die-linkage.

It is to be hoped that Peter Woodhead's exemplary sylloge volume will stimulate renewed work on the English gold coinage - at the next level of detail, that is, individual dies, not just 'because it's there', but in the hope of bringing the coins and the bullion tables into more precise alignment, with due attention to fluctuations in the survival rate, and the contribution of particular hoards. There is plenty to do - in particular to contruct ageprofiles of the hoards as an approach to the changing composition (and volume) of the gold currency, distinguishing between English and foreign hoards in that regard (and perhaps, even, between the main regions of England, e.g. north vs. south, etc.). The amount of surviving evidence is by no means lavish for this task, which should provide a basic series of statistics for English monetary history. This is an inexact science, requiring sensitive judgement. Until now, numismatists studying the English gold coinage have focussed their enquiries very much upon the coins at the point of issue, and on the arrangements for their issue - and much less upon what happened to the coins after they were put into circulation. Metrology is another area where the evidence deserves to be scrutinized afresh in the framework of comparing the individual hoards.

D.M. METCALF1

Coincraft's Standard Catalogue of the coins of Scotland Ireland Channel Islands & Isle of Man, by R. Lobel, M. Davidson, A. Hailstone and E. Calligas (Coincraft, London, 1999). 439 pages, illustrated. £34.50.

THE second volume of Coincraft's Standard Catalogue, like Seaby's before it, covers the coins of Scotland, Ireland and the islands. However, as with the Coincraft English catalogue, it comes in a larger format. It is well laid out and produced, with an extensive range of illustrations, for the most part of a good quality. The reader should find it a pleasant book to use.

The Scottish coinage, split between hammered and milled, is dealt with chronologically reign by reign, and up to the end of Alexander III's first coinage in 1280 issue by issue, since only pennies were struck. From John Baliol, however, listing is by denomination from the largest value to the lowest. Thus for David II his gold noble of 1357 comes first while his earliest coins, the pennies and halfpennies of the 1330s, appear towards the end of the reign's entry.

It might be expected that Ireland would be dealt with in the same way, but somewhat inconsistently the Irish coins are listed wholly by denomination. Thus the hammered section begins with the issues of the Civil War. The earlier Hiberno-Norse pennies only appear much further on. The milled section starts with the Bank of Ireland tokens of the early nineteenth century. Jersey, Guernsey and the Isle of Man are also dealt with by denomination under the pre-decimal and decimal periods.

The denominational approach is novel to the Scottish and Irish series which have hitherto always been treated chronologically. This latter method seems to have worked quite satisfactorily. This, of course, should not preclude other approaches and having all the groats or pennies together should make identification of such a piece quicker and easier. However the complicated coinages of James VI seem only to have become more confusing. Cataloguing by denomination is perhaps better suited to more modern, simple coinages.

The large format and greater length allows considerably more space and detail for each entry. Apart from a clear, highlighted heading, there are included 'Collecting Hints', obverse and reverse legends with translations, obverse and reverse descriptions, the Coincraft reference number and up to three valuations or degree of rarity, usually accompanied by one or more photographic illustrations.

The types and inscriptions are quite clear and full, and it is useful to have the translation beside rather than having to seek it in a single list at the front or back of the book. The collecting hints are on the whole helpful though some of the shorter ones are repetitious and do not indicate more than can be gleaned from the valuations. Valuation is always difficult but the prices given seem to reflect the current trends reasonably well, much as one would like to see some of them lower. The reference number seems somewhat cumbersome and continually jumps by five, thus Seaby 5131 and 5132 = Coincraft SR24D-005 and SR24D-010.

The Scottish hammered section commences with a potted history, the style of which could be improved. Otherwise it may be noted that, though privy marks did begin in David II's reign, the cross at the start of the legends remained merely an initial cross. Mary Queen of Scots was legitimate. Charles I was not the only surviving child of James VI in 1625. His sister Elizabeth, the 'Winter Queen' of Bohemia, outlived Charles until 1662.

In the catalogue there is a tendency to tidy and simplify standard terminology which may make its use easier for the new collector but may lead to confusion when moving on to previous, and accepted, studies. Thus Stewart's four *periods* of David I's pennies become first to fourth issues. William the Lion's Short Cross pennies, which should logically now be termed his third issue, are headed 'Short Cross & Stars Issue'. Within this, classes I and II are the same as the long-established Stewart phases a and b; phases c and d become Alexander II's classes I and II. The collecting hints are omitted for William's Short Cross issues and could have indicated that the Hue Walter phase b issue is by far the most common and readily available.

By contrast the term Long Cross is not used to any obvious degree, Alexander's first coinage is listed as classes 1-7 and care will need to be exercised in discussing any of these Long Cross classes since elsewhere they are given as types II-VIII (I being transitional). In the list of

<sup>&</sup>lt;sup>1</sup> The editors would like to thank Professor Metcalf for agreeing to write this review when it became clear that the person first approached would be unable to complete it. The long delay between the publication of the sylloge and the appearance of this review is emphatically not of his making.

mints Dunbar has been re-instated without explanation and the DUN equated with this town, along with the FRES, should continue to be assigned to Dumfries.

At the other end of the hammered section the turners of the 1630s were struck at the Edinburgh Mint, by Briot using machinery. The term 'halfgroat' to describe the turners of Charles I is unusual, especially as those of James VI are termed 'turners or twopences'.

The section on the Scottish milled coinage begins with a short but interesting resumé of the issues. However Sir John Falconer of Balmakellie should be allowed to retain his correct name and place of origin, and William of Orange should remain the Second of Scotland and the Third of England. There is much more detail here in the entries which are well arranged. The gold for the pistole issue of 1701, however, came from Africa not Darien. The Edinburgh issues of Queen Anne after the Union are omitted, though there is a note of intent to include them in the next edition.

There follows a section on the early 19th-century countermarked dollars. There is no reference to the countermarked copper, nor indeed to the large series of Scottish trade tokens which are more available to the collector. The inclusion of 'Ecus and other pieces' perhaps gives such pieces a respectability they may not deserve.

The Irish coinage is also divided into hammered and milled sections. However, the full denominational approach introduces the hammered series with the double pistole of 1646, a coin so rare the collector is hardly ever likely to see one, let alone acquire a specimen. Civil War issues continue until the section on shillings which begins with those of Edward VI.

The section on groats is perhaps the best argument for the format used and should prove useful. The lower values follow in order. The pennies begin with the Hiberno-Norse issues, which are dealt with in some detail and in their seven chronological groups, though nowhere is there reference to the well-established Phases 1–VII. The initial heading to the Anglo-Irish pence describes John as 'King of Ireland' but even after 1199 he remained Lord of Ireland — Ireland was only raised to the status of a kingdom by Henry VIII.

The introduction to the Irish milled coinage covers the topic very well and makes an interesting read. The catalogue starts with the two higher value and the two lower value Bank of Ireland tokens interspersed by an entry for an somewhat overvalued 'Northumberland' shilling of 1763. Thereafter the pennies, halfpennies and farthings are well detailed and illustrated.

James II's Gunmoney is subsequently dealt with, in some depth, on its own. After 1823 there were no further Irish coins until after independence, when in 1928 the committee chaired by W.B. Yeats chose Percy Metcalfe's very successful designs. These are listed and then the decimal issues.

There follow the sections on Jersey, Guernsey and the Isle of Man, again giving odd mixtures of older and modern coins together although the reader quickly becomes used to it. The inclusion of the Amorican issues at the start and, later, the Hiberno-Manx issue loses much by the lack of illustration. The main problem with the islands series is the large amount of recent commemorative issues. This is dealt with satisfactorily, and for the Pobjoy Mint issues of the Isle of Man by a sensible brief listing.

The Bibliography could be improved. It contains much inconsistency and incompleteness. The many important works on the Scottish coinage by Lord Stewartby are indicated by a sole reference to *The Scottish Coinage* – and only the first 1955 edition rather than the revised 1967 edition. There is no mention of the work of Colonel and Mrs Murray. The Scottish *Sylloge* was seemingly published some years before the authors were even born – it is number 35 in the Sylloge series, not published in 1935.

The cover of this catalogue perhaps promises more than it delivers, though what is presented is by no means to be disregarded. The denominational format is strange to these series and its use seems better suited to coinages after 1800. The catalogue gives the impression of wanting to be different and ending up so without real progress. However there is a wealth of detail, it is easy to handle and will have a place among the catalogues on these series. The update in prices is helpful and any collector paying these should not begrudge the price of this catalogue. It is, however, a book for the shelf rather than the pocket.

J.D. BATESON

The Soho Mint and the Industrialization of Money. by Richard Doty (Smithsonian Institution/British Numismatic Society/Spink, 1998), 351 pages, b/w illus. in text.

In this book Doty presents us with the results of his labours in the Matthew Boulton Papers, a massive archive containing many tens of thousands of documents now preserved in Birmingham Reference Library. After an introduction (pp. 1-22) putting Boulton into his Birmingham context and giving an overview of the foundation and development of the Soho complex, chapter 1 (pp. 23-73) tells the story of the three successive mints that operated at Soho between 1788-9 and 1850. The bulk of the book (chapters 2-9, pp. 74-296) is then devoted to an area which Doty has taken the lead in unravelling - the attempts of Boulton and his son, Matthew Robinson Boulton, to export their new, steam-powered mints around the world. Detailed accounts are given of their triumphs, tribulations (and failures) in Russia, Denmark, Brazil, India, Mexico, the USA, Austria, Germany and various other countries. The book ends with chapter 10 (pp. 297-339), in which Doty estimates the likely production runs of the assorted coins and tokens struck at Soho over the years (he estimates a grand total of at least 646,396,767 pieces).

The Soho story is fascinating and Doty is a good story-teller, producing a book that is a pleasure to read, with many felicitous (and memorable) turns of phrase. (On p. 11, after a particularly harrowing piece of doggerel by one J. Morfitt, we find 'Morfitt later decided to abandon poetry for the law. The Muse thanks him'). Doty's account of Boulton's frustrating relationship with Jean-Pierre Droz and the equally trying decade he spent angling for the government contract to strike a new copper coinage (which ultimately gave us the Cartwheel penny and twopence) is detailed and entertaining. Given the problems he faced and the financial losses he endured over this period, one can only admire Boulton's persistence – and acknowledge how much he owed to the forbearance and support of Mrs Charlotte Matthews, his banker from

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1792, when her husband died, until her own death in 1802. Not only did her willingness to extend him regular loans tide him over his perennial cash-flow crises, but from 1795 her house doubled as his London office and, in 1797, it served as the warehouse from which the Cartwheels were fed into circulation in the capital.

Inevitably there are some minor errors and points to note. Two examples will suffice. First, Boulton's father came to Birmingham from Lichfield, not Litchfield. Second, we do know the date of Boulton's second marriage – it took place at Rotherhithe near London on 25 June 1760 (E. Delieb and M. Roberts, *The Great Silver Manufactory, Matthew Boulton and the Birmingham Silversmiths* 1760–1790, pp. 18–19).

More seriously, at the start of the book (p. 2), Doty maintains 'nor does there appear to have been a consistent habitation there [sc. Birmingham] through most of the Middle Ages'. But Birmingham did not spring suddenly into existence in the sixteenth or seventeenth century. It was probably a mediaeval new town, founded around 1166 by Peter de Birmingham. The town clearly flourished very quickly – by the early 1300s it was paying the second largest tax bill in Warwickshire, more than the county town of Warwick and second (albeit a poor second) only to Coventry, one of the greatest cities of England at the time. Doty's market town of the 1530s had actually been a thriving centre of metal, cloth and leather working for almost four centuries. What has misled generations of historians is the failure of Birmingham's lords to obtain legal status as a borough for it; although they treated it as a town and it functioned as a town, Birmingham remained legally a village right up until the nineteenth century. Doty also notes Birmingham's lack of a mint in the Middle Ages, 'which is a fair indicator of a town's importance through most of Britain's history'. In fact, with the exception of a few months minting at Coventry in 1464-5, there was no mint at all anywhere in Warwickshire from 1158 until the eighteenth century, Birmingham simply appeared on the scene just as minting in England became more and more centralised!

Doty's account of the organisation of the Mint business is not as clear as it might be, although he rightly puts Boulton at centre stage as the driving force behind it. The Soho Mint was not run by the Boulton and Watt partnership, but was solely owned by Matthew Boulton (and subsequently by his son and grandson). The firm of Boulton and Watt (later Boulton, Watt and Company) did not make coins, nor did it sell mints. Rather it acted as a subcontractor to the Mint in this aspect of the latter's business, contributing vital technical advice and expertise.

Other aspects of Doty's account have also been questioned. For example, we would disagree with the view of Matthew Robinson Boulton propounded by Doty (and others). It is a misconception that he largely retreated to his country estate at Great Tew in Oxfordshire; he used it mainly during the shooting season. Soho House continued to be the family's main residence during his lifetime and he spent much money improving both the house and its grounds. He also remained actively involved in running the whole range of businesses that came under the Soho umbrella.

Doty also states (pp. 37, 302-3) that the Macclesfield and Cronebane tokens were the first money in the world to be struck by steam. While the case for the Cronebane

tokens is clear, others have argued that the evidence suggests that in fact no Macclesfield tokens were actually struck by Boulton.

Finally, recent work by George Demidowicz on the physical layout and the development over time of the mint (and its machinery) and of the other buildings at the Soho Manufactory suggests that Doty's account may now need revision on a number of points. For instance, the discovery of previously unrecognised plans pertaining to the second Soho Mint and archaeological investigations carried out in 1996 throw new light on its development and operation.

These criticisms should be seen as reflecting the vast amount of work that still remains to be done on Boulton and his mint. As Doty himself remarks in his 'Acknowledgements' (p. vii), '... there will certainly be errors in a study such as this, so much of which consists of material never before published, or even examined. But I shall take my chances with the mistakes, in the hope that they will stimulate further discussion and lead to better truth'. We can only applaud these sentiments, congratulate Doty on his ground-breaking work so far and look forward to seeing, in the pages of this journal and elsewhere, the further discussion that Doty invites and which his book should do so much to stimulate.

RITA MCLEAN AND DAVID SYMONS.

The Gold Sovereign, second edition by Michael A. Marsh

This edition is superior to the original. It contains more in-depth historical background, very good plates and more importantly, the listing has been updated. The first edition published in 1980, coincidentally or not, appeared during the Gold Boom. The number of collectors of gold coins increased in this period and *The Gold Sovereign* became a useful pocket reference for collectors, auctioneers and dealers alike.

Without doubt the sovereign is an extremely popular coin. There are still many surprises as new pieces turn up due to the fact that being one of the most predominant gold coins, trusted internationally, vast hoards still languish in bank vaults, and sales like the 'Douro' Cargo sold at Spink in November 1996 reveal further new varieties. If one includes die numbers there are now over 800 different pieces. This argues well for a regular update by the author.

The Gold Sovereign, second edition, is a worthy successor to its established forerunner. It affords the collector, whether novice or expert, a well researched and interesting account of the scenes behind the production of the coin, in particular from the Royal Mint. The reader is now given a brief introduction to the origin of the sovereign in 1489. Within the preamble to each reign the book has been updated, revising current trends and describing in detail new varieties which have come on to the market. Mr Marsh offers the collector his opinion on the rarity of certain pieces and the difficulty in obtaining them, together with prices realised in various auction sales.

There is some background to events and personalities at the Royal Mint in connection with sovereign production. Mr Marsh is eminently readable, helping to inform the new collector especially. The book is heavily devoted to currency coins but does refer to and illustrate some of the later proof issues including the 1953 sovereign. There

is also an interesting section on related items such as sovereign holders + scales and weights, which has been updated with further plates.

Mr Marsh also discusses the problem of forgeries which are prolific in this series. Most forgeries emanate from the Middle East. Fortunately, many of these are crude productions. However, it would be helpful to point the inexperienced collector in the direction of a reputable dealer for guidance and advice, usually freely given, illustrations of spurious pieces would also have been welcomed.

Typographical errors are few, the most obvious (and amusing) being on p. 33, where a 1863 sovereign, die 827, is recorded as turning up in a hoard in Hatton in Derbyshire in 1854! Throughout the book the author discusses relative rarities and includes a rarity rating in the list. Although rarity is at best subjective, there are some serious anomalies, a few of which I have mentioned below. However, most of these come in the 20th century and in general the rarity guide is reasonably accurate.

1879 St. George Reverse - London (R4). I consider this to be a very high rating, probably R2 is more realistic. In a new section in the book, dealing with the Sydney branch sovereigns with the Australia reverse, in particular the rarity of the 1855 and 1856 is in my opinion considerably underestimated; relatively these terms should be R3 and R2 respectively. He states that the Edward VII 1908 Canada sovereign is of equal rarity to that of the 1819; this is incorrect and the 1908 turns up with great regularity and should be considered R3. Again, under Canada he gives a high rarity to 1913 and 1914 sovereigns; most will agree that these are not rarities and even now the 1916 sovereign is certainly more common than R5. Perhaps one of the most obvious anomalies is the 1920 Sydney sovereign which he gives R3; I have only seen 2 of these coins in 30 years. This is substantiated by the example sold in Spink Auction no. 90 in 1992, lot 438, for a world record price of £104,000.00 net of commission, and yet the 1926 Sydney is given a higher rating of R4, made £16,000.00 in the same sale. There are several other examples that one could give but this is perhaps not the right forum. It would have been advisable perhaps for Mr Marsh to have asked dealers for their opinion in this respect rather than rely on auction catalogues and lists alone, as many of these pieces have been sold privately.

There is one other matter relating to the following group of coins: Victoria, young head, St. George reverse sovereigns, initials Large B.P. 1880 London, 1881 Melbourne, 1882 Melbourne, 1887 Melbourne, 1880 Sydney, 1881 Sydney and 1882 Sydney.

I have never seen these coins and they are all given generally a scarce rating. I am not entirely sure of their existence, I am prepared to be corrected, but surely a hoard of 30,000 pieces such as the 'Douro' Cargo, where every coin was inspected, would have revealed pieces, bearing in mind their relatively common rating; it did not do so. This is also borne out by the fact that these pieces are not included in the now *Spink Standard* Catalogue, which reveals more varieties for this series than the author publishes, revealing in fact 2 reverse types; horse with long tail and short tail; and 2 obverses, with W.W. on a broad truncation and WW buried in narrow truncation,

along with small B.P. and no B.P. There are a considerable number of die link permutations within this group.

In conclusion I would like to congratulate the author for a very useful book which I am confident will prove popular with all sovereign collectors. It is extremely readable and has excellent plates. The reviewer hopes that Mr Marsh will find the forgoing criticisms constructive and of assistance to him in future editions.

MARK RASMUSSEN

British Copper Tokens 1811–1820, including those of Ireland, the Isle of Man and the Channel Islands, by Paul and Bente Withers (Llanfyllin, 1999). 264 pages. £75. ISBN 0 9516671 5 7.

The first review in the very first volume of this *Journal*, by the catalyst of the foundation of our society, W.J. Andrew, was a short appraisal of W.J. Davis's The Nineteenth Century Token Coinage. It was a book, Andrew remarked, 'likely to be accepted as the standard work for years to come on the subject matter treated'.1 Although superseded in respect of the nineteenth-century silver series by Dalton's catalogue in 1922 - augmented by Waters' notes of 1955 and Mays' lively contextual survey of 1991 - Davis's pioneering study has remained the authority on the copper tokens for almost a century, probably far exceeding even Andrew's expectations. Until now that is. For, while 'Davis' will still be important for students of early eighteenth-century Irish tokens, 'Highland' bracteates and the few nineteenth-century private pieces, its treatment of the main run of copper tokens produced for the British Isles between 1811 and 1820 has been effectively replaced by the book under review.

Paul and Bente Withers declare that their intention had been to produce a revised edition of Davis's work but the frustrations of the original - dependent, as it is, on verbal and not always accurate descriptions of its material - led them to abandon this plan, to restrict their catalogue to the 'commercial' copper tokens of the Regency period and 'to re-write completely, illustrating fully, and adding "new" information' that they and others had 'unearthed'. What has resulted from their labours, despite their honest disclaimer of completeness, is a comprehensive conspectus which will stand the test of time. Virtually all the tokens they have catalogued are represented by excellent, evenlytoned photographs. Sufficient in themselves to distinguish most minor varieties, these reproductions are backed up by meticulous descriptions and, where further explanation of detail is thought necessary, the occasional line-drawing. The authors have supplied diameters - sensibly, since the photographs are not always exactly 1:1 - as well as the average weights of the tokens they have examined, their die-axes and edge types. These last - over fifty of them are defined and illustrated by enlargement in an appendix; and this is no trifling nicety since, as the Withers plausibly infer by reference to Thomason's known productions, a study of the groupings of these edges - as of the many die-links they also record - may eventually give us some insight into the presently unknown identities of the manufacturers of the bulk of the series.

Incorporated into an expanded list of 'British

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Non-Local Tokens' are the anomalous, but muled, varieties that Davis interspersed among his authenticated tokens elsewhere as well as Picard's 'Wellington' tokens which the authors, on reasonably good grounds, suggest never circulated in the Peninsula; it would be interesting to know whether any of the latter have ever been found there. Also retained in this section, and augmented, are all the halfpennies that are now thought to have been specifically struck or exported for Canadian use and on which the authors raise some apposite queries.

Some collectors may regret the abandonment of Davis's ordering of the tokens by traditional county but, as the Withers point out, the various changes in local authority nomenclature and boundaries since 1904 have made their listing alphabetically by town a more sensible arrangement, facilitating, too, the adoption of a practical 'running-number' system for the catalogue as a whole. Davis, in any case, did not invariably get his counties right, not least by putting Bristol, under Somerset and 'Glanclywedog' under Denbighshire. But for those wedded to the pre-1974 'Davis' counties these are bracketed after the town name in the catalogue entries and set out in the concordance with 'Davis' (Appendix 3).

What does seem slightly eccentric is the decision to list those tokens where a town name is not so obvious under the name of the issuing company. The tokens of the British Copper Company and the Withymore Scythe Works, for instance, are so cited when, following the authors' general scheme, it would surely have been more appropriate for them to have appeared under the respective embraces of 'Walthamstow' and 'Dudley' (or 'Netherton') although, to be fair, they are cross-referenced from these places. Au contraire, the Withers, though properly doubting the attribution, have chosen to retain Davis's eponymous location of Sedbury Gloucestershire for the 'Sedbury Iron Works'. Sharp was forced to relegate this delightful example of the diesinker's art to his pennies 'not payable by individuals' along with the 'TIC' issue which we now know, thanks to the late George Boon's researches, to have been a genuine piece of the Tredegar Iron Company. That the Withers have so far been unable to resolve the 'Sedbury' conundrum is something of a personal disappointment to the present reviewer who had hoped to be disabused of his unhappily-held notion that this penny must be a specious production of Thomas Halliday. (Two of the reviewer's own specimens, by the way, are overstruck on Jersey Bank tokens, not mentioned by the authors as re-used flans).

But these are not important considerations. British Copper Tokens is the result of exact and committed study, and, standing in stark contrast to so much that has been written about eighteenth- and nineteenth-century tokens in recent years, it is, in all its essentials, a catalogue raisonné of the mainstream of the latter series.

Like any such work of reference worth its salt it seeks to set its subject in its contemporary social and economic context and to provide a foundation for a re-evaluation of the series as a whole. The wealth of information furnished on issuers, die-sinkers and manufacturers, some from secondary authorities but a great deal more from contemporary sources, will enable the student to correct the misconceptions and discard the irrelevancies derived from the lumber accumulated by industrious but less fastidious commentators in the past; like Samuel, for instance, whose handiwork seems to have been so much in vogue over the past few decades and whose pronouncements have gained a fallacious respectability founded on mere repetition. Sharp, quite rightly, is recognised as probably the most reliable index to the engravers of the series even if, having, as he himself stressed, 'no guide to direct his steps' and working from a limited collection, he is by no means infallible.

The introductory profiles of engravers and manufacturers who have left so little personal record of themselves will be pivotal to further research. Halliday – like his precursor Hancock of a generation earlier – is now shown as unlikely to have struck tokens on his own account, and the number of actual manufacturers to have been far greater than Davis credited: at least seventeen or eighteen to his two or three, if Halliday is discounted. Again, this would accord with what we are finding out about the eighteenth century where the Westwoods, Whitmore and perhaps Phipson are already upsetting the scenario presented by Charles Pye and his coadjutors.

The rest of the book's introductory material - essays on the historical setting of the tokens, on their dies and manufacture, coupled with a biographical sketch of Davis and commendably sound advice to collectors - is all that it should be: thorough, well-written and with a lightly-worn command of its subject.

There are irritations over presentation: the biography of Davis meanders through the book like a stream that has lost its way, some 'Suggestions for Reading' have implanted themselves in the body of the catalogue, pecutiarly divorced from the 'Bibliography' proper, a significant chunk of the introduction to 'British Non-Local Tokens' on page 182 is replicated from the 'Non-Local' section on page 26 while John Williams's Cornish 'Accommodation' pennies are strangely separated from his 'Scorrier House' pieces by the quite unconnected issues of the rich West Wheal Fortune Mine of which perhaps rather more might have been said.

But these criticisms do not affect one's overall conclusion that the Withers' new work will deservedly be accepted as the modern enchiridion to nineteenth-century copper tokens, a corpus unlikely to be extended other than by the odd new discovery, and a springboard for further research to which the authors have enthusiastically pointed the way. The book is inevitably expensive but, as Andrew said of 'Davis' all those years ago, it is 'altogether better value than even the tokens were that it so carefully describes'.

D.W. DYKES

<sup>&</sup>lt;sup>1</sup> To be fair to Davis, Dalton and Hamer, and subsequently Dalton *per se* = a Bristolian himself = also set the city in Somerset. Samuel and Williamson had earlier given it to Gloucestershire, the county with which Bristol is commonly associated, and more forgivable since its historic centre lay mainly to the north of the Avon.

Convict Love Tokens: the leaden hearts the convicts left behind. Edited by Michele Field and Timothy Millett. Published by the Wakefield Press, South Australia, 1998. 128 pages. Laminated card covers, illustrated throughout, eight colour plates. £12.99

This book is an example of a work produced primarily to accompany an exhibition. Of course, this type of publication is not new, for one can think of catalogues produced for permanent museum exhibitions connected with coins, medals and other distinct numismatic fields. Rather, the fact that the amount of literature on these engraved tokens is indeed sparse lends me to believe that this work may well in the future be seen to be a major reference work in its own right.

In 1998 the first showing of Timothy Millett's (TM) collection was exhibited at the Powerhouse Museum in Sydney, Australia. It then went to Perth and Hobart. In early 1999, formed largely of the British Museum and TM's collections, the exhibition was put on show at the BM and then at the Museum of Law.

The book has an Introduction, five chapters of essays, each contributed by different authors and on differing aspects, with the whole chosen to produce an even-handed overall account, a catalogue of known convict love tokens, and finally a list of the names portrayed on the tokens. There are plenty of illustrations, which one would hope for in a specialist publication of this type. In the main, black and white photographs are used where the host piece is receptive to reproduction. Also, there are a few colour plates and many quite excellent line drawings by the artist Nick Griffiths.

The historical perspective is important to comprehend when looking at these tokens. Judicial sentence of transportation was made for offences against the State which today would only command a fiscal fine or even the more dubious 'community service'.

The opening chapter – 'Leaden Hearts' is an illustrated descriptive analysis of the backbone of TM's collection, some seventy pieces purchased from Dennis Vorley, and we learn how he came to this field. These pieces are a social development of the giving of love tokens as mementoes or keepsakes during the seventeenth century, possibly influencing the idea of producing a token whilst awaiting transportation.

All of these pieces are extremely rare. Evidence suggests that production was commonplace between 1815 and 1845, and of the 300 seen by TM, less than ten show a direct reference to transportation. The 1797 Cartwheel penny was unpopular with the public because of its heavy weight, but it was popular with convicts because, as it was made of relatively soft copper and was large for a coin piece (36 mm diameter), it served as an ideal base for rubbing down, and there was enough space for the convicts to engrave their messages of affection and farewell before they were transported to Australia to serve their sentences. TM explains that the messages on the tokens range from basic stippling with something like a nail or pin to high engraver's art, executed with a graving tool. The engravings on the tokens can be roughly classified into four groups: 1 - executed by a professional or trained hand, 2 - appear to be copies of group 1, 3 - less gifted, of limited technique, but good amateurs showing thin guide lines, 4 - least expert, and rather crude in interpretation.

Was the clearly high standard of skill demonstrated in the engraving of some of these tokens put to good (honest) use in Australia? At present, there is no evidence that the makers of these pieces continued to produce work in metal, either as jewellers or craftsmen in metal. TM suggests that some tokens are so similar in their style of execution that they may well have been made to order. I surmise that possibly, in early nineteenth-century Australia, there was a demonstrable lack of a developed middle class, and thus little potential in a market for refined goods.

The following chapters outline the socio-economic backdrop to these tokens. If this book had been produced outside the numismatic orbit, then I would have preferred to see them placed at the beginning as introductory, then the main historico-catalogue following on. However, one must realise that this book, which will become a reference work on love tokens, was produced to accompany an exhibition, so that the emphasis and approach relates to that in the first instance.

Michael Flynn, who contributed the chapter on 'Dickensian Characters', informs us that from 1788 (North America no longer being available) to 1868, in excess of 160,000 souls were transported, including not only men and women, but children too.

In Tom Gretton's chapter on 'Last Dying Speech and Confession', he discusses the tokens' social connections with the popular catchpenny prints of the times, evoking public executions and popular art. He gives a good summing up of these tokens '... these convicts worked or paid to give material form to what effectively were their last words in the world they knew'.

However, I must disagree with one of his submissions, that the erasure of the King's head in preparation for engraving was in some way a protest against the State which was about to place the convict into such oblivion. I find this statement rather fanciful, as we cannot possibly know this to be true, and in any case, the mechanics of production would demand a reasonably smooth host coin in order to serve as an engraved love token, whatever the original design or portrait. These tokens are indeed pieces of social history, but the regular coinage was, after all, ideally to hand.

We are reminded that these convict love tokens are as much part of Australian history as tokens of remembrance. In his contribution on 'Memory and tokens of love', Paul Donnelly of the Powerhouse Museum in Sydney states that the perilous long journey by sea combined with the expense of passage made the viability of return to the homeland upon termination of sentence, a distinctly unlikely event, thus '... their past loves and lives were frozen in time'. He writes that 'what convict love tokens share with other keepsakes is an attempt to cope with a common feature of life; absence and separation from loved ones'. To numismatists, these tokens can appear to be delightful, interesting, crude or merely medallic-like mementoes. However, Mr Donnelly puts them into their historical context alongside mourning jewellery, enamelled coins and other keepsakes like suspended locks of interwoven hair. The phrase 'When this you see remember me' was commonly used not only on the tokens, but also on commercial items of creamware and as tattoos, which firmly associates these items with the working class.

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'Known Convict Tokens', the basic catalogue section of the book, has been compiled by TM and Peter Lane, President of the Numismatic Society of South Australia. It is a chronological listing of tokens recorded so far, by date beginning with 1780. Where there is no name or year, they have been placed after 1856. There is an acknowledgement to the collections referred to, and all tokens are stated as having the 36 mm Cartwheel penny as the host coin unless otherwise noted, e.g. the regal George III halfpenny, George III and IV pennies, Cartwheel twopence, and tokens.

I found the historical notes relating to each piece particularly informative. Judging by some of the detail that has been unearthed relating to the originators of the tokens, they have evidently been painstakingly researched. The difficulty in researching lies with matching a name with an identifiable person. Parliamentary papers are a good source, but there is still much genealogical work to be done, as we are informed in the Introduction. In Britain, there is a very strong and growing hobby devoted to researching our ancestors. In the writer's belief and experience the journals and newsletters of the local Family History Societies are a wealth of knowledge and research yet to be fully appreciated and seriously tapped by researchers and collectors of socio-economic and sociohistorical pieces such as tokens and medals of all types for information on surname distribution, occupations, commercial undertakings, as well as listings of all kinds of activity on life as it was lived. In the future, the authors hope to expand the reference section and the section on biographies. Finally, there is an alphabetical listing of names included at the back.

Overall, this work is a neatly packaged and presentable book. There is a wealth of information contained within its pages, and in this reviewer's opinion, represents the most laudable and attractive approach when writing about a numismatic subject — its relationship to the sociohistorical background.

ANTHONY GILBERT

Royal Commemorative Medals 1837–1977, volumes 2, 3 and 6 by Andrew Whittlestone and Michael Ewing, Vol. 2, Queen Victoria's Golden Jubilee, 1887 (Coins of Beeston, 1993), 152 pages, clip binder, £15.00. Vol. 3, Medals Commemorating Queen Victoria's Diamond Jubilee, 1897, (Coins of Beeston, 1998), 192 pages, laminated card covers £18.00. Vol. 6, The Medals of Edward, Duke of Windsor, (1894–1972) (Coins of Beeston, 1997), 120 pages, card covers £17.50.

The publication in 1998 of the third volume in the series is a welcome addition to those issued in 1993 and 1997 and the fact that they have appeared out of chronological order is proof positive of the difficulties and amount of work involved in trying to compile a comprehensive catalogue of medals concerning British monarchs during this very prolific period. The authors are to be congratulated on their decision to tackle this daunting task thus providing a valuable adjunct to *British Historical Medals*, which of necessity excluded many of the medals now listed in these three volumes.

The difficulties in producing books such as these, which are invaluable works of reference, are immediately

apparent. It is probably true to say that if one collects objects which generally cost very little, one is reluctant to spend a large amount of money on a relevant work of reference. The difficulty of finding a publisher under such circumstances is obvious. It would probably also have been quite uneconomic to have had the manuscript professionally set by the printers. Photographs, too, can be expensive to produce and greatly add to the cost of a book. As a result, the authors were faced with the task of composing it themselves; medal collectors and numismatists generally will be glad that they found themselves equal to the problem.

Volume 2 in the series was the first to appear and the numbering system here is based (as it is in the subsequent volumes) on the volume number being the first digit. The remaining digits follow in due order whilst leaving space for additional medals to be added should they appear. The medals themselves are catalogued in alphabetic order of medallist or manufacturer except for the first, which is the official medal for the occasion by the Royal Mint. The arrangement of volume 3 follows the same pattern, but volume 6, which has to deal with a number of occasions, lists the medals in chronological order. Unsigned medals are listed at the end of each catalogue.

Each medal is comprehensively described and the various sizes and metals in which they are to be found are also noted. An estimation of the rarity is given through eight grades ranging from VC (very common) to U (unique). An attempt has also been made to place a value on each piece. Any price guide in a catalogue of this nature can only be something of a eguesstimate, but the authors have considerable experience in the matter and the results may not be too far out.

The illustrations in all three volumes leave something to be desired, but coins and medals are notoriously difficult to photograph and even a defective photograph is better than none at all. Those in volume 6 are generally better than those in the other two volumes.

Volume 6 also has a comprehensive listing of the objects issued by Geoffrey Hearn and struck by John Pinches Ltd in 1954 bearing the portrait of Edward VIII. It was good to see these accurately described as 'fantasy crowns' thus, perhaps, making away with the aura of respectability that these pieces seem to have acquired over the years. Subsequent issues of fantasy pieces were published by the Pobjoy Mint and Richard Lobel and these, too, are comprehensively listed.

Throughout the three volumes there are occasional reproductions of documents, advertisements for medals and photographs of members of the Royal Family. The latter illustrations are, perhaps, superfluous and in the opinion of your reviewer, add nothing to the value of the books. What is of particular use and which is to be found in no other numismatic work on the subject are the listings in volumes 2 and 3 of the registered design numbers. These numbers appear on some Victorian medals and were used to protect the designs for a minimum of five years. Thanks to the authors it is now possible to attribute to a manufacturer or medallist some medals which were hitherto unidentifiable.

Each volume has indexes of makers, designers, die cutters and publishers, a general index and an index of obverse legends. Volumes 2 and 3 also contain indexes of medals of uncertain attribution and the aforementioned index of Registered design numbers. What the volumes lack, however, are indexes of reverse legends. A complicated and perhaps lengthy index to compile, but the books feel incomplete without it and such an index would add considerably to the usefulness of the work. Perhaps the omission will be rectified in future volumes.

These books have much to commend them, not only for the number of medals listed therein which would otherwise probably not have been published, but also for the amount of detail that the authors have given for die varieties and nules.

The authors are to be congratulated on the production of three useful books and it is to be hoped that the publication of the remaining five volumes will not be long delayed.

LAURENCE BROWN

Golden Atoms: The Ernest Rutherford Medals. Mark Stocker, Canterbury University Press, 1999. 88 pages. 36 ills.

Described as 'the Newton of the atom' and indisputably one of the greatest scientists of the twentieth century Ernest Rutherford was also a patriotic New Zealander. It was perhaps with this in mind that his family decided, after his death in 1937, to gift the thirty six medals accumulated by him (including a Nobel prize and the Order of Merit) to the University of Canterbury in Christchurch New Zealand.

There they lay, largely forgotten, in the University strongroom until rescued by Mark Stocker who, with assistance from Vickie Heamshaw, has published a catalogue of the medals with an introduction which admirably fulfils its aim of 'locating the medals in Rutherford's life, in art history and in numismatics'. All the medals are illustrated, some in colour, and Stocker has brought together a useful account of the creation of some of the more recent awards in the group

Less attention is given to the curious phenomenon represented by these medals which are, in the end, a group of objects, neither useful nor for the most part particularly beautiful, probably seldom displayed during the recipient's lifetime and unseen for many years after his death, but nevertheless quite typical of the tangible expressions of esteem accrued by many a famous person.

This adherence to traditional forms and to classical iconography, entirely eschewing reference to the realities of twentieth century atomic science, tells us something about the way in which prestige was accrued in the society which Rutherford inhabited. The monetary value of objects (the group contains medals made from 46 oz of solid gold) tells us more. Rutherford himself referred to this in a letter to his wife about the Rumford Medal in 1904: 'I got my gold medal and it is a stunner. It weighs 14 ozs, and probably has £50 worth of gold in it ... It will be a good way of saving money as it can always be melted down into dollars when required'.

The fact that he wrote this more than half in jest suggests that it might be interesting to consider, in a wider context, such groups as evidence for continuity and change in attitudes towards ritual giving and reward: continuity that speaks of the close association of status with long established practice and change that has transformed eighteenth century practice, which centred on the intrinsic value and actual display of medals (and similar), into a twentieth century retreat from both.

MARK JONES

#### PROCEEDINGS OF THE BRITISH NUMISMATIC SOCIETY, 1999

The President Dr D.W. Dykes was in the chair at all meetings, which were held at the Warburg Institute.

26 JANUARY 1999. The President announced the death of Dr G.V.L. Tatler. Professor D.C. Baker and Messrs J.E. Kennedy and D. Stuart were elected to Ordinary Membership. Mr R.H. Thompson then read a paper entitled *Token Issuers and the Herald's Visitations*.

23 FEBRUARY 1999. The President announced the deaths of Dr D.J. de S. Rogers and Messrs M.Y. Carter and E. Szauer. Messrs D. Bentall, P.M. Broomfield, M. Jobling and B. Ostro were elected to Ordinary Membership. Dr J.A. Davies then read a paper entitled *Iron Age Coinage in Norfolk* 

23 MARCH 1999. Messrs J.A. Longfellow, T.G. Phillips, P. Smith and M. Wade were elected to Ordinary Membership. Mr C.H. Comber then read a paper entitled *The Anglo-Irish coinage of Elizabeth*. A list of the coins exhibited is given below.

27 APRIL 1999. Messrs S. Critchley and R.F. Griffin were elected to Ordinary Membership. Mr J.E. Cribb then read a paper entitled *The numismatic designs of Eric Gill*.

25 MAY 1999. Messrs P. Gargett, P. Johnstone, E.R. Nixon, M.A. Mobbs, R.J. Robinson and J. Sills were elected to Ordinary Membership and the President presented the Council Prize to Dr P. de Jersey. Dr R.J. Eaglen read a paper entitled *The Mint of Huntingdon*.

22 JUNE 1999. Mr P. Woodhead was elected to Honorary Membership and the Spalding Gentleman's Society to Institutional Membership. Dr C.E. Challis read a paper entitled *Engravers and engraving at the Royal Mint in later Stuart England*.

28 SEPTEMBER 1999. The President announced the death of Mr D. Mangakis, a former Librarian of the Society. Mr F. Bulteau-Canteloup was elected to Ordinary Membership. Dr J. Cherry then read a paper entitled *The engraving of seals in the reign of Richard II and Henry IV.* 

26 OCTOBER 1999. Messrs. E.J. Jeffery and W.A. Mackay were elected to Ordinary Membership. The Howard Linecar memorial lecture was delivered by Professor G. Davies entitled *The single currency in historical perspective*.

23 NOVEMBER 1999. Mr P.M. Earland-Bennett was elected to Ordinary Membership, and the University Autonoma Barcelona to Institutional Membership. The following officers and Council were elected for 2000:

President: D.W. Dykes

Vice Presidents: C.E. Challis, C.S.S. Lyon, P.D.

Mitchell, H.E. Pagan, Lord Stewartby

and P. Woodhead

Director: E.M. Besly
Treasurer: T.G. Webb Ware
Librarian: A.J. Holmes
Secretary: C.R.S. Farthing

Council: M.R. Allen, M.M. Archibald, J.

Bispham, M.A.S. Blackburn, K. Clancy, R.J. Eaglen, C. Eimer, N.M.McQ. Holmes, M. Mays, S.C. Minnitt, D.H. Saville, R.H. Thompson

and G. Williams

Council's proposal that the subscription for 2000 should remain unchanged at £24 for Ordinary Members and £10 for Junior Members was approved. The President. Dr D.W. Dykes, then delivered his Presidential Address and was thanked, on behalf of the membership, by Mr H.E. Pagan.

#### **EXHIBITIONS**

March

Mr C.H. Comber exhibited coins in illustration of the paper as follows:

- 1. Elizabeth I (1st issue) base groat and shilling.
- 2. Elizabeth I (fine issue), 1561, groat and shilling.
- 3. Elizabeth I (3rd issue), 1601–3, base shilling. sixpence and threepence.
- 4. Elizabeth 1 (3rd issue), 1601-3, copper penny and halfpenny of 1601.
- Elizabeth 1(3rd issue), 1601–3, copper penny of 1602, devoid of ER at shield.
- 6. James I Irish shilling.

## THE BRITISH NUMISMATIC SOCIETY REPORT OF THE TRUSTEES FOR THE YEAR ENDED 31 OCTOBER 1998

The British Numismatic Society was founded in 1903, and is a registered charity (No. 275906). The Society is established for the encouragement and promotion of numismatic science, particularly through the study of the coins, medals and tokens of the peoples of the British Isles and Commonwealth and the United States of America, and of such territories as may at any time be or have been subject to their jurisdiction.

The trustees of the Society for the year ended 31 October 1998 were the officers and members of Council:

G.P. Dyer (President); C.E. Challis, C.S.S. Lyon, P.D. Mitchell, H.E. Pagan, Lord Stewartby, P. Woodhead (Vice-Presidents); B.T. Curtis (Director); T.G. Webb Ware (Treasurer); A.J. Holmes (Librarian); J.D. Bateson (Secretary); E.M. Besly, N.M.McQ. Holmes (Editors); M.J. Anderson, M.A.S. Blackburn, A.M. Burnett, J.A. Davies, D.W. Dykes, M. Mays, J.L. Morton, P. Robinson, M. Sinclair, G. Williams, P.J. Wise (Council).

The registered address of the charity is that of the Treasurer, T.G. Webb Ware, 35 Coniston Court, Kendal Street, London, W2 2AN. The Society's activities are governed by its rules, reprinted by order of Council, 1995.

The Society's bankers are National Westminster Bank, PO Box 10720, 217 Strand, London, WC2R 1AL.

The independent examiner is R.A. Merson, F.C.A., Tanyard House, 13A Bridge Square, Farnham, Surrey, GU9 7QR. The Society holds meetings on the fourth Tuesday of each month, from January to June and September to November at the Warburg Institute, University of London at which a substantive paper is read. On 4 July a special one-day meeting on *Mints, Dies and Coinage in the East Midlands* was held at The Old Palace, Lincoln.

In January 1998 the Society published Volume 66 of the British Numismatic Journal. This is a hardbound volume of 197 pages and 23 plates containing six principal articles and nineteen short articles and reviews. It also includes the Coin Register 1996 listing in detail 360 single coin finds in Britain and Ireland, the Presidential Address 1996, Proceedings 1996 and accounts for the year ended 31 October 1995.

The Brand volume, the first volume in the Special Publications series financed by the Osborne Fund, was produced in 1994. The second volume in this series, *The Soho Mint and the Industrialisation of Money* by Richard Doty was published in November 1998.

In October 1998 the Society produced a revised and updated Contents Listing of the British Numismatic Journal, Volumes 1 to 67. 170 copies of this Index have now been sold.

The Society also distributed to members three editions of the CCNB (Co-ordinating Committee for Numismatics in Britain) Newsletter containing short and topical articles, reviews and details of meetings and exhibitions.

The Society holds a substantial library, jointly with the Royal Numismatic Society, at the Warburg Institute. Books are available for loan to members, both in person and by post. The Society maintains a programme of acquiring new books and rebinding existing copies where necessary.

The Society pays annual subscriptions to the International Numismatic Commission and to the British Association of Numismatic Societies (BANS).

The Society is financed by an annual subscription of £24 paid by both private and institutional members, together with interest on cash held on deposit and donations from members over and above their subscription. It also holds a stock of backnumbers of the British Numismatic Journal which are available for purchase by members or non-members.

All the officers of the Society offer their services on a voluntary basis and administrative costs are kept to a minimum, consisting largely of postage and stationery.

The Society is actively seeking to increase its membership, both in Britain and overseas. It produces a factsheet and helps to staff the BANS stand at the annual London Coinex show. Over the last ten years membership has steadily risen from 500 to just under 600.

## THE BRITISH NUMISMATIC SOCIETY STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31 OCTOBER 1998

	General Fund £	Designated Funds £	Total 1998 £	Total 1997 £
INCOME AND EXPENDITURE	r	r	ı.	
INCOME RESOURCES				
Subscriptions and Entrance Fees received for 1998 and earlier years	12,625		12,625	12,193
Interest received	3,754	5,888	9,642	8,101
Donations	32	_	32	119
Sale of Publications:-	-			
Backnumbers	128	_	128	202
Special Publications	_	_	_	176
BNJ Index	847	_	847	-
TOTAL INCOME RESOURCES	17,386	5,888	23,274	20,791
RESOURCES EXPENDED				
British Numismatic Journal	14,404	-	14,404	10,757
CCNB Newsletter	520	-	520	495
BNJ Index	600	_	600	_
Sanford Saltus Medal	200	-	200	211
BNS Medal	35	_	35	-
Provincial Meetings	-	129	129	389
Grants – INC	-	-	-	500
Linecar Lecture	-	350	350	-
London Meetings	380	, <del>-</del>	380	627
Library	744	-	744	869
Subscriptions	100	-	100	96
Other printing, postage and				
Stationery	262		262	178
TOTAL RESOURCES EXPENDED	17,245	479	17,724	14,122
NET INCOMING RESOURCES, BEING NET MOVEMENT IN FUNDS	141	5,409	5,550	6,669
FUND BALANCES (B/F) 1.11.97	32,081	89,527	121,608	114,939
FUND BALANCES (C/F) 31.10.98	32,222	94,936	127,158	121,608

## THE BRITISH NUMISMATIC SOCIETY BALANCE SHEET AS AT 31 OCTOBER 1998

	1998 £	1997 £
GENERAL FUND	32,222	32,081
DESIGNATED FUNDS	94,936	89,527
	127,158	121,608
ASSETS:	•	
Library and Furniture at cost	160	160
Less amounts written off		
Stock of Medals	370	130
Stock of BNJ Index	545	-
Sundry Debtors	1,004	1,533
Cash at Bankers and in Hand		
Bank – Deposit Account	152,000	145,000
Current Account	1,849	1,743
	155,928	148,566
LIABILITIES:		
J. Sanford Saltus Medal Fund	400	200
Subscriptions received in advance	507	393
Sundry Creditors and Outstanding Charges	1,014	1,304
Creditors and Provision for Journals	26,849	25,061
	28,770	26,958
	127,158	121,608

Registered Charity No. 275906

The accounts were approved by Council on 28 September 1999

## THE BRITISH NUMISMATIC SOCIETY NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 OCTOBER 1998

#### 1. Accounting Policies

#### General

These accounts have been prepared under the historic cost convention and in accordance with applicable accounting standards and the Statement of Recommended Practice on Accounting by Charities.

#### Subscriptions

No credit is taken for subscriptions in arrears.

#### 2. Funds

Individual fund movements

	Linecar Fund £	Osborne Fund £	Benefactors' Fund £	Total £
Balance at 1.11.97	9,708	71,543	8,276	89,527
Income				
Interest received	640	4,714	534	5,888
Expenditure				
Lincoln Meeting	_	_	(129)	(129)
Linecar Lecture	(350)	_		(350)
Balance at 31.10.98	9,998	76,257	8,681	94,936

The General and Designated Funds are all unrestricted.

The Linecar Fund was started in 1986 with the bequest of £5,000 and Council has designated this Fund to provide an endowment for a biennial lecture in Mr Linecar's memory.

The Osborne Fund was started in 1991 with the bequest of £50,000 and Council has designated this Fund to finance the series of Special Publications.

The Benefactors' Fund consists of other bequests to the Society.

#### 3. Creditors and Provision for Journals

British Numismatic Journal 67 (1997), published December 1998	13,099
British Numismatic Journal 68 (1998), to be published December 1999	13,750
	26,849

## INDEPENDENT EXAMINER'S REPORT TO THE MEMBERS OF THE BRITISH NUMISMATIC SOCIETY

I report on the accounts of the Society for the year ended 31 October 1998, which are set out on pages 2 to 4.

#### Respective responsibilities of trustees and examiner

Council as the Society's trustees are responsible for the preparation of the accounts; and consider that the audit requirement of Section 43(2) of the Charities Act 1993 does not apply. It is my responsibility to state, on the basis of procedures specified in the General Directions given by the Charity Commissioners under Section 43(7) (b) of that Act, whether particular matters have come to my attention.

#### Basis of independent examiner's report

My examination was carried out in accordance with the General Directions given by the Charity Commissioners. An examination includes a review of the accounting records kept by the Society and a comparison of the accounts presented with those records. It also includes consideration of any unusual items or disclosures in the accounts, and seeking explanations from Council concerning any such matters. The procedures undertaken do not provide all the evidence that would be required in an audit, and consequently I do not express an audit opinion on the view given by the accounts.

#### Independent examiner's statement

In connection with my examination, no matter has come to my attention:

(a) which gives me reasonable cause to believe that in any material respect the requirements to keep accounting records in accordance with section 41 of the Charities Act 1993; and to prepare accounts which accord with the accounting records and to comply with the accounting requirements of that Act have not been met; or

(b) to which, in my opinion, attention should be drawn in order to enable a proper understanding of the accounts to be reached.

R.A. Merson, F.C.A. Tanyard House, 13A Bridge Square, Farnham, Surrey, GU9 7QR.

28 September 1999

#### PRESIDENTIAL ADDRESS 1999

#### D.W. DYKES

I am told that it is a commonplace experience that the older one gets the faster time seems to go by. Certainly, in my own case, I can hardly credit the fact that a whole year has passed since you did me the honour of electing me your President. It is an honour of which I am very sensible but I have to say that the very notion of the office, when first broached with me, was totally intimidating. Although my connections with the Society go back to the nineteen-fifties and over the succeeding decade or so I was to some extent involved in Anglo-Irish numismatics and token studies other responsibilities in the interim denied me, until fairly recently, any really direct participation in numismatics. Not only, therefore, did I feel something of the apprehension the returning Prodigal Son must have experienced as his home hove in sight but I found the prospect of the Presidency all the more daunting since each of my predecessors has been a far more distinguished numismatist than I can ever pretend to be.

In one crucial sense my foreboding was misplaced because my reception has been a very warm one and I have enjoyed an enormously happy and fulfilling year for which I thank you all. The Society is in good heart and vigorous, factors in no small measure due to the wise counsel and dedicated leadership of my immediate predecessor, Graham Dyer. A self-effacing man, he will not thank me for praising him. I will simply say that the Society owes him an immense debt; as Director, as Secretary, as Editor of the *Journal* and, especially, as President. Personally, I have found his ever-ready guidance and advice invaluable. He is a distinguished administrator. And last month his impeccable scholarship won him election to the Fellowship of the Society of Antiquaries.

The Society owes much too to our Vice-Presidents, and it was especially pleasing to me that in June Honorary Membership was conferred on Peter Woodhead in recognition of his services to the Society over nearly half a century. Peter Woodhead, President of the Society from 1976 to 1980, became a member as long ago as April 1952 – a junior member I hasten to add – and has made a significant contribution to medieval numismatic studies, especially in the field of thirteenth- and fourteenth-century coinage, but by no means restricted to this. His edition of the first *Sylloge* volume of the Schneider Collection, *English Gold Coins 1257–1603*, was greeted with acclaim. Already he is grappling with its successor, which will document the collection from the reign of James I, and which we await expectantly. Honorary membership is a distinction that is conferred sparingly and Peter Woodhead joins a select group: Peter Berghaus, Robert Carson, Philip Grierson, Stewart Lyon and Gay van der Meer.

The Treasurer has made clear to you that our financial situation remains a healthy one and for this year at least your late Council had no hesitation in recommending that the annual subscription should remain at the level it has been set for the last eight years. As Tim Webb Ware has intimated, however, the escalating costs of the distribution of the *Journal* are such that it may well be necessary for us to review this figure next year. The *Journal* is, in many ways, the most material benefit of membership and its scholarly content brings us high distinction. It is essential for our reputation that standards are maintained even if this means that their maintenance requires us each to pay a little more.

Our membership, in terms of numbers, remains buoyant. During the year we have elected 24 new members, and, taking account of our losses through death, resignation and amoval, membership now stands at 476 private members and 108 institutional members.

Sadly, death has accounted for the loss of four members. In November Dr G.V.L. Tatler, a member since 1954, died after a long illness. George Tatler had inherited a driving school from his father, but his real ambition was to study medicine, and he achieved the not inconsiderable feat of

running the business – in course even teaching our Vice-President, Peter Mitchell, to drive – and using it to meet his financial needs while he undertook his medical training. Throughout he maintained his connections with the Territorial Army from which he eventually retired as a full colonel. Yet, despite all these demands on his energies, he still found time for numismatics. Tatler's special interest was the Edwardian sterling coinage, his published contributions to its study including a review of the transition between Fox groups I and II in volume 28 of the *Journal*, a re-definition of the Montrave hoard in terms of the Fox classification, with Lord Stewartby, in volume 31, and a study of the Whittonstall Treasure Trove, with Michael Dolley, in *Archaeologia Aeliana* (1963). For many years he had been working on a die study of the output of the Bury St Edmunds mint in the name of Robert de Hadelie the results of which he presented in an address to the Society in March 1974. Unfortunately his heavy professional duties in the field of medicine and, latterly, his illness prevented him from finalising this important paper for publication. This has now been done by Robin Eaglen and Peter Woodhead, and the result will appear in the volume of the *Journal* about to be published.

Another medical man but probably someone rather more familiar to most members present this evening was Dr D.J. de Sola Rogers who was killed so tragically in a road accident in February at the age of 52. A specialist anaesthetist, David Rogers had to give up medicine because of increasing and debilitating ill heath but medicine's loss was numismatics' gain. Elected to the Society in 1967 his interests in coinage and its associated fields were eclectic and he tended to tread the more obscure byways of numismatic research which few people had explored systematically. Something of a lateral thinker, frequently unorthodox – and inevitably forthright – in his views, he was always stimulating and he contributed much to paranumismatics. His catalogue of 'Toy Coins' became a standard authority and he was working on a supplement at the time of his death. Latterly his thoughts had increasingly turned to the question of small change in the middle ages and it was at the Society's special meeting in Manchester in 1992 that I first met him. 'Small change' had become his *metier* and he was approaching the stage where one expected a major publication to appear very shortly. I recall him as a familiar figure in the Coin Room of the British Museum, equipped as he always was with his laptop computer, and he was guaranteed to enliven many a meeting in this room with his post-lecture comments and exhibits.

Emil Szauer joined the Society in 1963. Hungarian born, but settled in Ireland since 1950, he was, initially, the sales representative for a German company. Always a keen collector of coins he started dealing in the 1960s and developed into Ireland's foremost professional numismatist whose Dublin shop became a mecca for numismatists from around the world for over a quarter of a century. A distinctive character he will be greatly missed.

Merrick Y. Carter, whose interests lay in English hammered coinage, was elected a member of the Society in 1975. I did not know Mr Carter, who was originally from Shrewsbury but long domiciled in Canada, but I do just remember Demosthenes Mangakis. I mention 'Dimi' Mangakis, because, although he was no longer a member at the time of his death, he had been the Society's Librarian from 1948 to 1950 and was (by some way) the senior former officer of the Society. A member from 1945 until he left Britain for Greece in the 1970s, his not-undistinguished collection of English medieval coins was dispersed by Spink and Son in 1969.

On a much happier note I was able in May to present on your behalf the Council Prize to Dr Philip de Jersey. The intention of the Prize, awarded every three years, is both to recognise achievement and to foster further effort among the younger generation of scholars. Dr de Jersey is already making a fundamental contribution to our understanding of Celtic coinage and he has, too, demonstrated his flair in the skilful interpretation of his subject to a wider audience. We can, I am confident, look forward to much more in the future. For the record, the words I used on the occasion of the presentation will be published in the *Journal* that will carry this Address.

Iron Age coinage – in Norfolk – was the subject of a talk given by John Davies in our lecture programme for the year, a programme which, as usual, was rich, stimulating and varied. Robin Eaglen gave us a foretaste of the fruits of his researches on the Huntingdon Mint, Christopher Comber brought clarity to the intricacies of the Anglo-Irish coinage of Elizabeth I, and our Vice-President, Christopher Challis, departing somewhat from his scheduled script, with characteristic

brio, entertained us with biographical sketches of the engravers, Thomas Simon and Henry Harris, actor as well as Mint official. Robert Thompson opened the session by stressing the importance of contemporary Heralds' visitations to the study of seventeenth-century tokens while Joe Cribb introduced us to the lesser-known numismatic work of Eric Gill, a topic made the more immediate because of the lecturer's family connections with the artist.

Two of our speakers were visitors. John Cherry, Keeper of Medieval and Later Antiquities in the British Museum, prompted a valuable discussion on the inter-relationship or otherwise between the engraving of seals and coins in the reigns of Richard II and Henry IV which, I felt, demonstrated the importance to a numismatic audience of a subject which might, prima facie, have seemed only tangential to our studies. I think both numismatist and sigillographer, if that is the right word, realised that they had a lot to gain from each other's scholarship.

Our lecture programme culminated with our sixth Linecar Lecture delivered by Glyn Davies, Professor Emeritus of Banking and Finance in the University of Wales, on the subject of *The Single Currency in Historical Perspective*. Professor Davies, an historian of distinction and former economic advisor to government, dealt with his complex theme in a clear and simple way and with a panache that can come readily only to someone who straddles with equal ease both the academic and the real world. He held his audience throughout in a way that Howard Linecar, a fluent communicator himself, would have thoroughly approved and I look forward to reading Professor Davies's thought-provoking talk which is published in the *Journal* which carries this address.

Our summer 'out of town' gathering, now an established feature of our calendar which affords such a valuable opportunity to meet members who would not normally be able to get to London and the local numismatic community, was held in Taunton on 3 July when an enthusiastic audience enjoyed a miscellany of papers on West Country themes. Paul Robinson, Michael Metcalf, Edward Besly, Stephen Minnitt and Graham Dyer spoke on subjects extending from the medallic depiction of prehistoric monuments to Martin Coles Harman and his 'Puffins'. My thanks are due to Stephen Minnitt and the Somerset County Museums Service for their hospitality and for their organisation, with our Director, Edward Besly, of a memorable day, little intruded upon by the melancholy strains of a band of Peruvian pipers during the morning and the distant din of the conflicting soldiery of the 'Sealed Knot' in the afternoon.

Already plans are in hand for next year's meeting – on East Anglian numismatics – which will be held in Colchester on Saturday, 8 July. The programme, judging from the draft I have seen, promises to uphold the high quality we have come to expect of these meetings and I am grateful to Edward Besly and Philip Wise for making it all possible.

Publication of research is a cardinal activity of the Society. I have already referred to the importance of our *Journal* in this respect. Thanks to the munificence of the late Roy Osborne and the enthusiasm of our past Presidents Christopher Challis and Graham Dyer, we have been able to expand this activity and to embark on a series of more extended monographs. John Brand's study of 'Short Cross' coinages and Richard Doty's review of the Boultons' Soho Mint have been the first fruits of what we are determined will be an on-going programme of high quality 'Special Publications'. In my recent *Newsletter* I indicated the works that we had in mind for publication over the next few years. Tonight I can say that we have every reason to believe that Harry Manville's *Tokens of the Industrial Revolution: Tradesmen's Countermarks on Silver Dollars* and *Trial Plates* by Christopher Challis and Graham Dyer will appear sometime during the latter part of next year.

I was privileged in March to be invited to a reception at the British Academy held to celebrate the publication of fifty volumes of the *Sylloge of Coins of the British Isles*. My attendance there, as your President, reflected the fundamental role played by our Society in the foundation of this major serial publication in the late fifties and it was a matter of particular pleasure to find so many of our members among the distinguished company of *Sylloge* editors gathered together for a happy occasion felicitously hosted by the current Chairman of the *Sylloge* Committee, our Vice-President, Lord Stewartby.

One of the *Sylloge* editors present was Nicholas Mayhew and I would like to take this opportunity of congratulating him on his recent appointment as Keeper of the Heberden Coin Room and of wishing him every success in his new post.

I also represented the Society at the opening of two exhibitions: in January, at the National Museum and Gallery of Wales in Cardiff, 'Towards a Single Currency' mounted jointly by the Museum and the Royal Mint. Whether by accident or design – and I suspect the latter – this outstanding exhibition chimed in well with the theme of our own Lecture; and in June, at the Bank of England Museum, of the presentation by the Bank and the Mint of 'The Sterling Pound', the latter occasion being enlivened by the striking presence of Grunal the moneyer – aka our member David Greenhalgh. I mention these two exhibitions particularly to stress the important support that the Mint gives to the public exposition of historical numismatics despite all the commercial pressures on it these days.

And, indeed, to active scholarship. My current work on trade tokens has necessitated frequent forays to the Mint library where I have always had the warmest welcome and whose rich holdings – for me the books of Miss Sarah Sophia Banks – have so readily been made available to me. Such a welcome was equally apparent, when, wearing another hat as an officer of the Priory for Wales of the Order of St John, I attended the first striking by our Grand Prior, the Duke of Gloucester, of a medal commemorating the nonacentenary of the Order. The Deputy Master, Roger Holmes, could not have been more hospitable and although the occasion might not be thought to bear directly upon the Society, I must tell you that the original idea of such a medal was that of our member, Sir John Wheeler, a fellow Knight of the Order of St John. The only sad note of what was a very successful day was that Graham Dyer, who had done so much to make everything possible, was taken ill in the morning and could not be present.

It has, I fear, been a matter of great concern to the Librarian and your Council to discover in recent months that books have been stolen from the Library and that pages have been cut out of publications. Such behaviour is criminal and an abuse of the free access that members have to the Library. At present we must all submit to having our bags searched when leaving the building but if such damaging behaviour continues more stringent controls on the use of the Library will have to be introduced.

Apart from this unpleasant and distressing discovery the year has been a good one for the Society. In large measure this is due to the unstinting, and totally voluntary, efforts of your Officers and Council and, on your behalf, I should like to extend our gratitude to them all: to the Director, Edward Besly, for seeing through our lecture programme so capably, a programme, I hasten to add – for the creation of such programmes is no mean feat – skilfully conjured up by his predecessor, Thomas Curtis; to the Treasurer, Tim Webb Ware, now completing more than four-teen years in office, for so effectively husbanding our finances; and to the Librarian, Tony Holmes, whose equanimity belies all the frustrations he has had to face this year, from the 'millennium bugs' affecting our library computer to the depredations affecting our books.

To the Secretary, Charles Farthing, I would like to add my own personal tribute, for, new to the office himself, he has had to cope with a tyro President, and thus to bear a more than usual burden in a key role, a burden he has shouldered with characteristic cheerfulness and competence. And I would add here our Editor, Nick Holmes, who has had the unenviable task of having to steer volume 68 of the *Journal* through from inception to production single handed. It says much for his enthusiasm and dedication that one can state with every confidence that it will appear before the year's end. Nick can at least look forward to some relief next year when he will be joined by Gareth Williams as Production Editor and by Richard Abdy as compiler of the Coin Register.

My debt to the Council as a whole is a great one. Much of our discussions have, as a matter of course, related to on-going issues but, as I have indicated, we are looking to the future too. I have mentioned publications: we are also actively investigating the advantages of having our own webpage on the internet and how this could most effectively be established. I think that this is something that we will be able to key into by the spring of next year.

At the outset of this address I thanked you all, the membership as a whole, for your support. I would like to stress those thanks again. But your loyalty requires more than just words and, later, I am glad to say that you will be able to enjoy the opportunity of toasting the health of the Society,

made possible, this evening, through the generosity of our Vice-President, Peter Woodhead. I fear, though, that your pleasure must be put on hold until you have experienced the pain of listening to the second part of my address.

(The President then delivered a paper entitled 'John Gregory Hancock and the Westwood Brothers: An Eighteenth-Century Token Consortium', the text of which is published at pages 173–86, above.)

## PRESENTATION OF THE COUNCIL PRIZE TO DR PHILIP DE JERSEY, 25 MAY 1999

In making the presentation, the President said:

It is my very great pleasure this evening to be able to present the Council Prize for 1999. As you will know the Prize, instituted in 1986, is awarded every three years to a younger scholar, whether or not a member of this Society, who is making a significant contribution to those aspects of numismatics which fall within our objects. One cannot want for distinction in the list of past recipients: Mark Blackburn in 1987, Edward Besly in 1990, Barrie Cook in 1993 and Martin Allen in 1996. Tonight, we add the name of Philip de Jersey to this notable group.

I am sure that you will all be aware of the fundamental advances that Philip de Jersey is making to our understanding of Celtic coinage. His researches on the late iron age period in north-west France won him his Oxford doctorate in 1992 which was subsequently published to acclaim as *Coinage in Iron Age Armorica*. The meticulous scholarship and judicious appraisal of evidence that he displayed there has been followed through in his papers and reviews as we ourselves had the benefit to observe when he spoke to us in 1995. That he can also interpret his subject to a wider public on a more popular level, without any sacrifice of academic standards or indulgence in speculative interpretation, has been established by his Shire Archaeology booklet *Celtic Coinage in Britain*.

Since 1992 Dr de Jersey has run the Celtic Coin Index at Oxford with dedication and enthusiasm. He has brought order to a major research tool and now, with the aid of modern technology, is fast developing a resource which will prove crucial to the unravelling of the complexities of Celtic coinage in Britain.

The underlying intention of this Prize is both to recognise achievement and to encourage further effort. Tonight we are doing the first. I am confident also that Dr de Jersey's future scholarly activities will bear witness to the second of these aims.

Dr de Jersey, I have very much pleasure in presenting you with the Council Prize of the British Numismatic Society for 1999.

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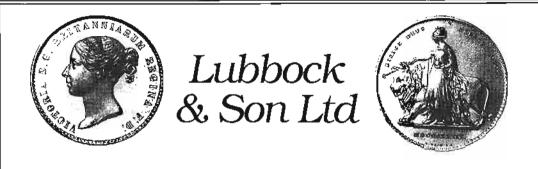
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